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TRANS-HIMALAYA

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TRANS-HIMALAYA

DISCOVERIES AND ADVENTURES IN TIBET

BY

SVEN HEDIN

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VOLUME III

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Trans-Himalaya, and have shown how immense was the area of this mountain system completely unknown before my journey.

Three other chapters contain *résumés* of those journeys which had the sacred lake of Manasarowar and the source regions of the great Indian rivers for their goal. Herein I demonstrate that before me no European, nor even an Asiatic of note, had penetrated to the true sources of the Indus and the Sutlej, and that the position of the source of the Brahmaputra had never been determined, though it might be guessed whereabouts the head stream gushed forth from the foot of the glaciers. A polemical tone was unnecessary, for no allegations worthy of credit have ever been made to the contrary. I let the facts speak for themselves; they are, as always, very eloquent.

I have avoided all wearisome citations in the popular scientific chapters. I am treating the same questions fully in the scientific work which will shortly be issued, and in which all sources will be carefully indicated.

My thanks are due to Dr. Nils Ekholm for the calculation of absolute heights, and to Professor Anders Hennig of Lund for the identification of rock specimens.

SVEN HEDIN.

STOCKHOLM, *October* 1912.

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CHAPTER I

FROM THE SOURCE OF THE INDUS THROUGH UNKNOWN COUNTRY

AT camp 236 my horses and mules crop the tender grass that grows round the source of the Indus. The new-born stream babbles noisily among the stones in its bed, and I hear it in front of my tent like the roll of an organ in a classical mass. Its song will swell out to crashing thunder on the way through the Himalayas, but the melody is always the same, and to the music of the Indus ripples the Macedonians once defeated the peoples of the East (see Vol. II. p. 214).

My tent is anchored by its iron pegs in ground on which no European has set his foot. I am proud of being the first to visit the source of the Indus, and yet meekly thankful. From this point, where the river springs from the bosom of the earth, the increasing volumes of water hurry down towards the sea. The height is stupendous. I am resting at 16,946 feet above the level of the ocean. An Eiffel Tower on the summit of Mont Blanc! Not the eternal river alone, but the whole earth lies at my feet. I have crossed the Trans-Himalaya a fourth time and have at last reached the goal I aimed at.

Of the source of the Indus the geographers of old—Greek, Roman, and Arabian—knew nothing. Since the day when the claws of the British lion closed round the land of the Hindus, the cradle of the Indus has been repeatedly moved and located now here now there. At

length English officers sent out native scouts to search for it, and these men found the head-stream, but not the source itself. And now I listened to its monotonous murmur.

I had five of my best men from Ladak with me. They had accompanied me on my adventurous march right through Tibet; they had endured a bitterly cold winter, and surmounted the Trans-Himalaya by unknown passes; with deep devotional feeling they had heard the chants resounding through the cloister courts of Tashi-lunpo, had visited the shores of the holy lake, and on the summit of Kailas had raised their eyes towards the paradise of Siva.

I spoke Jagatai Turkish with my men, and Rabsang translated for me into Tibetan. Tundup Sonam took care of our guns and Adul stirred the pots as they simmered over the cooking-fire.

A lucky chance had thrown a Tibetan nomad named Pema Tense in my way. Allured by the liberal remuneration in bright rupees which chinked in my hand, he had let his comrades go their way and offered me his service on the route north-eastwards through unknown country. From him we hired eight sheep and bought their loads of barley. Thus my own baggage animals were not overladen, and could now and then get a good feed in a country as bare and naked as immediately after the deluge.

We set out on the morning of September 11, 1907, and the hoofs tapped again on the hard frozen soil. The temperature had fallen in the night to 11.3°. In Tibet winter is a guest which comes early and stays late. The sky was light blue and clear, and the rainy season, which we had scarcely felt, was over. But the winds of the south-west monsoon howled and moaned over the highlands, and where the soil was loose dust flew up from the hoofs of the horses.

The land lies flat and open before us. It is the "Northern Plain," the Chang-tang of the Tibetans, the high plateau with its flattened surface forms. Behind us

rises the Trans-Himalaya with its wild precipitous rocks The valley we follow is broad and enclosed between high irregular mountains. The Bokar-tsangpo, one of the head-streams of the Indus, glides noiselessly between its ice-lined banks. Its water is cold and crystal clear, and it is evident that it comes from snow-fields and springs and not from glaciers.

In an expansion between the heights to the left of our route white rings of salt glitter round the small vanishing lake Jekung-tso. The same name is given to the pass to which we ascend along a ravine between bare weathered cliffs. The Bokar-tsangpo is left behind us, but in the south-east we see the bluish heights with the thin snow-fields whence the brook draws some of its water.

On the other side of the pass also we are still in the basin of the Indus, for the rivulet which meanders among small clumps of faded grass down the Lamo-latse valley joins the Bokar-tsangpo.

Pema Tense waddles whistling and singing behind his eight sheep and is always ready to give me any information I ask for.

"What is the name of this place?" I ask him at a spot where a row of cairns covered with *mani* stones crosses the path.

"Shantse-gong," he answers. "Here the pilgrims greet the gods of Kang-rinpoche, for from here the actual summit of the holy mountain first comes into sight." Pema must have been imposed on with this tale, for not a glimpse of the mountain can be obtained from the cairns.

Some tiny rivulets still trickle down through the yellow moss, the only vegetation visible, to the Lamo-latse brook. I mention them because the easternmost rivulet should perhaps be regarded as the true source of the Indus.

Another obstacle appears in our way, and then the path leads to the pass of Lamo-latse sunk in a steep crest of quartz porphyry. Here is the watershed of the Indus. To the east stretches an elevated country which has no

drainage to the sea. We are at a height of 17,802 feet. Two cairns mark the top of the pass, decked with yaks' horns and rags, the offerings of pious superstitious pilgrims. The six holy syllables " Om mani padme hum " are inscribed in black on coloured streamers, and when the rushing wind makes the streamers flap and crack, one can fancy that " Om mani padme hum," uttered by many voices, is borne by the wind over the desolate plateau to bring blessing and happiness to the troops of pilgrims.

Yes, up here the stormy wind rages furiously. I have to place myself with my back sheltered from the wind when I read the instruments, so as not to be carried away. And what a prospect towards the east-north-east! Do you imagine it is beautiful? It is terribly desolate, almost awful. I feel as lonely and forlorn as in the midst of a sea, a petrified sea with bell-shaped billows that are black and red near at hand and pass into yellow, green, and violet in the distance. I seem to stand on the crest of a wave looking down on all the others. Space without end! I should have to wander about for days and years to reproduce all these details on my map sheets. Here I take in at a single glance an enormous block of the earth's crust. Waste, cold and lonely. No men, no animals, no plants! But the sun lights up the ground and the wind howls among the rocks. There is no other sign of life.

It is pleasant to encamp (camp 237) after such a day. We pitch the tents as quickly as possible to get shelter from the storm which sweeps the ground like a stout besom. But the air is clear, for there is nothing loose to sweep away from this ground polished by the wind during millions of years. We look in vain for a yellowish-green patch which might be pasture land, and so one of the sheep is relieved of its load of barley.

When the camp is pitched at three o'clock, the afternoon seems long and the hours of solitude seem never to come to an end. I write down in my diary a description of the bit of earth I have seen since sunrise. The rock

specimens I have picked out of the hills with my geological hammer are numbered and wrapped up in paper. And then Pema Tense must give me his company for a while.

"What is the name of this valley?" I ask him.

"It is called Lamo-latse-lungpe-do, and it opens after three days' journey into a large plain."

"Where is your home, Pema?"

"My tent stands in Gertse, sir."

"How far off is it?"

"Oh, quite fifteen days' march. We reckon eleven days' journey from Yumba-matsen to Gertse."

"Are there many nomads in Gertse?"

"My tribesmen live in two to three hundred black tents, and we own large flocks of sheep which are our only wealth."

"Tell me something about the profits you derive from your sheep."

"Well, you see, some nomads shear their sheep themselves in Gertse, and carry the wool on yaks thirteen days' journey to Tok-jalung, whither merchants from Ladak and Hindustan come to market. Others let the sheep carry their wool to market, and the purchasers do the shearing. But those nomads do best who break salt out of the beds of dried-up lakes, pack the lumps of salt on their sheep, and tramp in midsummer all the way to market at Gyanima and to the shore of Tso-mavang, where the sheep are shorn, for they make a profit on the salt as well as on the wool. And when they travel home again their sheep are laden with barley, which they have obtained by barter. Such a journey, outwards and homewards, occupies the greater part of the summer. The sheep graze by the way, no permission being asked, and so we nomads spare our own grass for the winter."

The Tok-jalung gold-field, at a height of 16,340 feet, is one of the highest permanently inhabited places in the world. Pema Tense had often been there, and told me

that in summer 300 tents sprang up out of the earth, for at that time gold-diggers came thither from Lhasa and other places. During the winter only some thirty tents stood there. It is bitterly cold, and often a storm of powdery snow sweeps over the broad expanse.

Pema Tense looked out through the tent opening, and when he saw that the twilight was falling over the earth he rose and went out to look for his sheep and tie them up by the tents for the night. Then, after chatting a while at the camp fire of the Ladakis, he rolled himself up in his skin coat like a hedgehog and fell into a sound sleep. He had given us due notice that he intended to make off altogether as soon as we met travellers or caught sight of a tent, for if he were caught travelling about with strangers and guiding them into the forbidden land he would be beheaded as surely as twice two make four. Therefore, he wanted his rupees paid to him every evening; and he always got them in full.

The storm keeps us company all night long. There is something depressing in this constant wind, which, according to Pema, will last quite eight months. It makes the tent cloth flap and beat like a sail and it whistles and groans among the ropes, and a cold draught sweeps over the ground where I lie wrapped up in furs and felt rugs. The temperature sinks to 18° in the night; but at seven o'clock it is already up to 40.3°.

I slip quickly into my clothes and am hardly dressed when Adul comes in with my breakfast consisting of two vertebræ of the last-killed wild sheep, fresh bread and tea. Outside the Ladakis are shoeing my white steed, the faithful animal which has carried me many hundred miles through dreary Tibet. On this troublesome ground of thick accumulations of detritus the horses become footsore and must be carefully attended to.

We long to get out of this country which has nothing to offer but water and wind. The path is easily recognizable, and winds along like a light-coloured riband. Innumerable

men and animals have trodden it down and sunk it in the ground. Pilgrims have swarmed from Gertse, Senkor, Yumba-matsen, and other regions of Tibet to the holy mountain and the wonder-working lake. Here and there are seen signs of their camps, a slab of stone blackened by fire, and three stones between which blue flames have flickered above yak dung and brought the water in a kettle to the boil.

Hour after hour our little company marches onwards. There is seldom anything unusual to attract our attention. Here lies the bleached skull of a wild sheep, *Ovis ammon*, with its heavy beautifully curved horns. The valley opens on to a plain and we turn aside from the brook which disappears northwards. Its water murmurs melodiously under a thin sheet of ice. A small herd of wild asses or kiangs is disporting itself on the plain, but makes off when we set up our tents at camp 238 beside a wall of dry yak dung. The nomads, who have collected this fuel and are now feeding their flocks in some other spot, will certainly be surprised to find that most of their store of fuel is gone. If we could get no other luxury we would at any rate enjoy a large roaring fire at even.

The next day's journey brings us to a small pass through cliffs of porphyry; on the farther side Pema Tense leads us through a valley deeply sunk between wild weathered walls of rock, and with its bottom covered with a deep layer of sharp pebbles. At times a small patch of yellow grass appears with stems as hard and sharp as needles. In two sheltered gullies hairy ragged nettles struggle for life. Otherwise the country is everywhere dismally barren, dried-up and desolate.

Beyond a second saddle consisting of limestone we at last meet a solitary traveller.

"Where do you come from?" Rabsang asks him.

"From Yumba-matsen," he answers shortly, quickening his pace.

"Where are you going?"

"To a tent not far from here?"

"What have you to do there?"

"I have left a boot behind," he replies, making off as quickly as possible. Certainly an absent-minded gentleman! Pema Tense thinks that the man belongs to a band of robbers.

A gradually ascending path brings us to the Tsalam-ngopta-la pass, 16,660 feet high, adorned with two cairns and the usual prayer streamers. All round the horizon the view reveals nothing new. Still on all sides stretches the same dismal country. No black tents, no flocks. We have marched north-eastwards for six days and only met a single traveller.

Here at any rate we run no risk of being stopped by dictatorial governors and militia levies. We feel ourselves to be the lords of the land. If I had a larger caravan, more men and more provisions, I could travel unhindered a very long way eastwards. There is a peculiar charm in the adventures and excitement of a forbidden route. But the object of the present excursion—the source of the Indus—has been attained, and the main caravan is waiting for us at Gartok. Well, it may wait. As all is going well, we will try to advance two days' journey farther to the north-east. We leisurely descend the slope from the pass and prepare for the night in the Gyamboche district at camp 239.

On setting out on September 14, we decided that our next business was to look out for the tent of the head-man of Yumba-matsen, who, Pema Tense believed, was staying in the neighbourhood. Every hill which seemed to promise a wide prospect was climbed by one of our party. Several times we thought we saw black tents to the north-east, but in the telescope they resolved themselves into heaps of rubbish or ring fences, which the nomads use as sheep-folds. The only thing we discovered was the small lake Nyanda-nakbo-tso.

Singular country! The mountains do not form con-

tinuous chains but rise in rolls of weathering products or steep humps of solid rock, apparently without any order. They are yellow and red, violet, grey and black. The surface is coloured, but the tones are subdued and solemn.

The people of the country seem to have fled before us, but to-day signs of man appear. The way passes twelve *mani* walls with stones bearing the everlasting "Om mani padme hum." Round an open pond four such votive cairns are erected. The animal life also announces a more favourable country. A covey of partridges chirps on the pebbles of a slope, and five of them are a welcome addition to our store of provisions. They are plucked at once and their feathers whirl in the air like wind-driven smoke. They are cleaned on the march, and are tied together and secured on the back of the white mule, where the head of a wild sheep, killed at the source of the Indus, is already enthroned and nods at every step of the mule. Wild asses are also seen more frequently than before.

The view in front is again barred by a small ridge at the foot of which grass more luxuriant than we have hitherto seen grows round a spring. A long well-kept *mani* wall runs up the slope, and not far from it stand perhaps a dozen cairns in a row. There must be men here. We hurry up to the crest, keenly expectant, and hope to catch sight of black tents on the other side, but not even the field-glass can detect a single Tibetan. Only wild asses wander over the plain, two hares race along a slope, and some bluish-black ravens circle leisurely above our heads. For the rest the desert stretches silent and dreary before us, and in the background shimmers the little lake.

Disappointed we move onwards. We approach the lake basin and the air becomes milder. Were it not for the horrible wind we could enjoy here a last touch of departing Summer.

After a time the desert scene is enlivened by 500 sheep which trot before us in the same direction. Ah! there are our friends from Singi-buk, Pema Tense's comrades, with

their caravan. They took another route and now we are following in their track. Gertse is their destination. The sheep carry small loads of barley, for which the herdsmen have bartered the easily won salt they have taken from the ground.

Now we are on the steppe round the lake where grasshoppers fill the air with their rattle, and lizards dart noiselessly over the sand. We notice on a slope by the farther shore fifteen *mani* walls. Astonished at finding them piled up so far from the track, I ask Pema Tense about them, and he asserts that they are tombstones of dead Tibetans.

A second lake now appeared behind a small isolated hill of limestone, and thither we directed our steps. The water may be drunk by any one who is not too particular. But we did not put our stomachs to the proof as Ishe, one of our Ladakis, discovered a spring of fresh water near the eastern shore. There we made ourselves comfortable enough to spend a night in the desert. The arrangements had been partially provided by the nomads, who now and then pitch their tents on the lake shore and feed their yaks and sheep on the good pasturage. There is a steep wall of phyllitic schist which can easily be split into slabs, and several small *mani* walls are built of them. On the top of one sits a yak skull with huge horns; the six holy syllables are carved in its white forehead and filled in with ochre so that they are red as blood. An old skin coat and a vest had been left among the stones.

Out on the lake a flock of ducks were quacking, and at dusk twenty wild geese alighted on the shallow water. Then a shot cracked and put an end to their repose. Three of the far-travelled visitors found their way into our kitchen. When the darkness of night fell over the earth we heard again an eager conversation among some sixty wild geese as they splashed in the water on whizzing down folded their wings above the surface. They came from the south-west and were off again next morning before us.

Soon cold weather would cover the mud with a crust of ice and force the wild geese to return to lower, warmer regions.

After sunset deep violet shadows rose up in the east, turquoise-blue tints lingered a while in the zenith, while sulphur-yellow flames hovered over the western horizon. They soon paled and went out, and the camp fires burnt all the brighter. Out in the lake, which has a very slowly falling bottom, were heard splashing footsteps. It was Tundup Sonam returning with his game. At the foot of cliffs of schist the dogs barked at the echo of their own voices. Their bark pierced sharp and shrill through the otherwise silent night.

CHAPTER II

THE NOMADS OF YUMBA-MATSEN

THE thermometer fell at night only to 20.8°, and yet a clear sheet of ice was formed over the old lake. We were not the only visitors resting on the shore. A caravan from Gyanima had come up early in the morning in three detachments, and one of the party cautiously approached our camp to find out what sort of men we were. Rabsang entered into conversation with the man, and asked him if he had any eatables to sell. Oh yes, he could spare a little butter and rice, and he would go at once to fetch them. However, he had hardly had time to exchange a few words with his friends, when they hastily loaded their yaks and sheep and disappeared northwards up the valley leading to Gertse. Did they take us for highwaymen?

We take down our tents and load our animals, I swing myself into the saddle, and off we go through the hopelessly dreary country. Wild asses scamper in herds over the plain by the shore. They are shy. At Tso-mavang one can go near them whenever one likes. No one sends a bullet after a kiang within sight of the mountain of the gods, and the animals know that the holy lake and its shores are a sanctuary. But here, where there are no holy places, the wild asses are quite aware that the wolf is not their only enemy.

The plain rises imperceptibly to the eye towards the valley opening Gyekung-sherma. Where are the nomads in this God-forsaken land? A mountain flank to the south is spotted black. Can it be grazing yaks? No,

the field-glass shows us that it is only heaps of fuel and small cairns. The country cannot be uninhabited everywhere, for we have seen so many traces of old camps.

To-day there is no wind. In the valley where the sun has heated the limestone rocks it is actually hot. The valley is short, and is bounded in the background by a low pass. At last! There comes a troop of black yaks trotting down the slope. Are they roving tribesmen from Yumba-matsen or another caravan from Gertse, which crosses our course like a ship on the sea without sending us a greeting across the waves? At all events we will not let these free rovers escape us. We must procure provisions and means of transport at any price, and if the men grumble we will treat them in Asiatic fashion, just as if the days of Timur had returned.

My men longed to see men of any kind; only Pema Tense was in despair.

"It must be the chief of Yumba," he said. "If he catches me he will beat me to a jelly, and then take from me the ninety-six rupees I have received from you."

"Then perhaps it will be best for you to pack up your things and be off, Pema."

"Yes, but let me stay here a while until Rabsang has been up the valley to reconnoitre."

Rabsang went and returned after an hour. It was really nomads from Yumba-matsen, who were just moving their quarters. Two tents were already set up. The yaks would graze a while, and then be driven back over the pass again to fetch another part of the movable property of their masters. A large heap of various articles and packages containing meat, barley, and *tsamba*, was already piled up on the new camping-ground.

Now all was plain. The barley still left was put on one of our horses, we said good-bye to Pema Tense, and wished him every good fortune on his long journey to Gertse, and went on up the valley. We saw him sit down on the detritus and quietly light his pipe. There he remained

for a time looking after us, and then he gathered his sheep together and walked down towards the lake. He would soon overtake his comrades, and would return home in their company.

We were going to make new acquaintances. Two Tibetans came to meet us, saluting us in an embarrassed manner when we came near their tents. We immediately drew from them by questions all they knew about the geography of the country; they told us that Yumba-matsen is the name of a district lying east-north-east of the pass. There, there are forty-five tents under the command of the Gova or headman. Their flock graze in summer in a region lying still farther to the north-east. At the end of October they come down to the shores of the Mugu lake, and remain there during the coldest winter months. As soon as the early spring has succeeded to the sharpness of winter, they return slowly to Yumba-matsen.

In this way the nomads describe an orbit through one region after another as the seasons change. In summer they are to be found in one valley, in autumn in another. When the frost of winter covers the Mugu lake with a sheet of ice the wild asses know that it is time to depart. Thus it has been from father to son since the most remote antiquity. The experience possessed by the nomads of to-day is a heritage from innumerable preceding generations. They have discovered that the pastures in Yumba-matsen are best suited for summer grazing, and that the meadows round the lake suffice for their winter needs. When the winter herbage is consumed they return gradually to their summer dwelling-places. A people whose existence depends entirely on sheep-rearing, develops those powers of observation which are useful in the improvement of their flocks. They know every spring, every cave in their home country, and know what poisonous plants make the pastures dangerous. They wean the lambs from the ewes at the right time, and carefully accustom the sheep

to carry small burdens. Against the wolves of the wilds the nomad is always on his guard, and in all the vicissitudes of life goes to work carefully with his inherited knowledge.

The chieftain of Yumba-matsen owns 500 sheep, and all his tent community 8000. Two hundred yaks and fifteen horses also belong to his subjects. The sheep are sheared in the middle of August, and the wool is sold to dealers who come from Ladak and the Indian frontier. A large sheep yields half a rupee. At Tso-mavang the wool is dearer, but there the purchaser is saved a large part of the cost of transport.

Our Tibetans were in the service of the Yumba chieftain, and could not help us without permission from their master. Therefore I sent one of them back over the pass to request the Yumba-matsen-chigep, as he is styled, to come to us. By that time it was evening, and we could not expect him before the next morning.

The evening was cold and calm. We had 3½° of frost at nine o'clock, and 23½° in the night. The bluish-grey smoke whirled from the fire like dancing elves down the valley, driven by a slight breeze from the pass. The vault of heaven, dark blue and clear, spanned the earth, the stars shone like sparkling jewels, the wreath of mountains formed a straggling coal-black frame round the camp, and above a ridge the moon displayed its silvery disc.

I lie awake for a while listening to the mysterious silence. The moonlight casts a subdued light through the tent covering, and here and there a bright shaft finds its way through a hole. We are all soon fast asleep in this singular, mysterious Tibet.

When I went out of my tent in the morning, two well-to-do nomads were sitting talking to my men. They wore loose black skin coats, soft felt boots with red ties, and red turban-like bandages on their long shaggy hair.

They rose, scratched their heads, and put out their tongues according to the custom of the country. It was no wonder that they were a little embarrassed, for they

had never seen a European before. But the negotiations had hardly commenced when their shyness disappeared.

"Which of you is the Yumba-matsen-chigep?" I inquired.

"Neither. The chief could not come himself, but he has sent us with his greeting. Where do you come from, sir, and whither are you travelling?"

"I come from Kang-rinpoche and am on my way to Gartok."

"But why are you travelling north-eastwards when Gartok lies to the south-west?"

"I have come hither to buy provisions and hire baggage animals. To-morrow, five horses and as many yaks must stand before my tent ready for travelling."

"On that matter only the chief can give you an answer. When the Serpun, the gold commissioner, travels through our country he is empowered to use the baggage animals of the nomads without remuneration. But you have no *lamik* (passport). We have not been informed of your coming even by a *jaik* (message stick). Therefore the chief cannot grant your request."

"Very good, then I will send two of my men to Gartok and will remain here in the meantime. But if you will yourselves bring up the animals I require, I will pay two rupees a day for each horse and one rupee for each yak, and besides give a liberal recompense to the drivers I want. Do you agree?"

"The horses and yaks shall stand ready before your tent to-morrow," they answered, after I had paid them the money for the first day. Now they became agreeable and accommodating, and paid not the slightest heed to all the prohibitions issued from Lhasa. They could rely upon the silence of their fellow-tribesmen, and the wild geese tell no tales.

"Tell me what you know of the country to the east," I begged them. And they told me all sorts of things, but their range was limited. They knew the Lakkor-tso

which I visited in 1901, had heard of the Dangra-yum-tso which I had lately seen in the distance, and had often ridden to Selipuk and the Nganglaring-tso, sometimes by the northern road across a gold-field, sometimes by the southern, which passes the source of the Aong-tsangpo, a river entering the Nganglaring-tso. By either way the journey takes four days; nomads of the Rundor tribe have tents round the lake.

We started on September 17, after a cold night. Forty fully-laden yaks tramped slowly and heavily down the valley. It was a new association formed of four tent groups which was migrating from Yumba-matsen to the mouth of a side valley situated farther down. Each tent community has its own camp, and there are no disputes about pasturage where the old customs are rigorously adhered to.

The baggage animals ordered were punctually provided. The horses were small and shaggy but remarkably plump and well-fed considering that they had been reared in such a wilderness. When the chase has been productive they are fed on dried meat; and this perhaps helps to make them look so round and sleek. The Tibetans shoe their horses only for long journeys, and then usually only on the forefeet.

Now my horses were to travel unburdened, for the yaks took the loads. My men, who had worn out their soles during a journey of 110 miles, were to ride. Our new guides went on foot, shouting and whistling as usual. Their right arms and bare right shoulders shone in the sunshine like polished bronze.

We bade farewell to the friendly nomads of the Gyekung valley and marched off by the way we had come, down the valley again. At the lakes, however, we diverged to the west, leaving our old road to the left behind us. Continuing the line of the small lakes a salt plain, the Mugu-telep, stretches out. Here the Tibetans halted beside a pond of fresh water and advised us to camp here for the night,

because the next spring was a long distance off. Some kiangs, Pantholops antelopes, and wild geese vacated the ground as we came up. A westerly storm arose at mid-day, and the fine white powdery salt from the Mugu-telep plain whirled like clouds of steam over the lakes.

The camp was larger and more animated than usual. We were eight men with fifteen baggage animals and three dogs. The Tibetans did their best, collecting yak dung for the fires, carrying water, leading the animals to good pasturage, and then entertaining us with all kinds of stories. But the day seemed long. It is trying to the patience to lie at anchor when one would like to be getting over the ground and hurrying on to new fortunes.

In the evening some fifteen wild geese came and circled screaming above the pool. But when they found the place occupied the leading geese drew off their party to the lakes. The sun had just sunk below the horizon, and all the plain lay in shadow. But the pilgrims of the air and their pinions were lighted below by the sun, and stood out bright and white against the blue expanse of heaven. Had they come a minute later they would have been hidden by the shadow of the earth.

At dusk some riders were seen on a distant height. Our Tibetans thought that they had come out to look for a flock of sheep which a few days ago had disappeared in broad daylight when the shepherd was asleep. Probably some bandits had seized the opportunity to gain possession of the sheep. The old Ladak songs sounded round the blaze of the camp fire, soft and melodious as in the days of old. I had heard them times without number in the long winter evenings on Chang-tang, but I was never tired of the plaintive tones.

The temperature down to zero on the night of September 18! That is severe so early in autumn. If one has not put oneself in a state of defence on getting into bed, one is soon reminded by the creeping cold that furs are necessary. The pond was covered with a bright sheet of ice. The air

was clear and calm, and the sun rose in splendour. By seven o'clock the temperature rose to 38° and at one o'clock to 64.8°. A range of temperature of more that 64° between night and day!

Our road runs north-westwards past two long salt lakes, called Tso-longcho, swarming with wild geese. The sun is burning and there is no wind. Now and then only a rushing sound is heard, and, turning in the saddle, I see a dust-spout coming; it whirls the sucked-up sand in helices and whizzes like a ghost over the plain. It rushes past us, revolving as it goes, thins out and vanishes in the distance; soon another follows.

Sigu-ragling-la is a small flat pass on our way over a ridge of quartzitic limestone that rises above the plain. This country is a desert that reminds me of certain parts of Eastern Persia. At a considerable distance are seen small hilly ridges of pink, light brown, or reddish colours; between them lies the plain so slightly undulating that I should not notice the inequalities did not the caravan far in front of us disappear now and then in a hollow, and after a time appear again on a rise in the ground. The road is excellent, with fine gravel thinly spread on firm yellow loam, but a blade of grass is nowhere visible. This track leads us north-westwards and, therefore, not in the direction of Gartok. I ask one of our guides the reason, and he replies that a detour is necessary because the springs are so few on the direct course.

Two small lakes are seen to the north, the Tso-kar or white lake and the Pul-tso or salt lake. The circular walls on their banks are signs of winter visitors.

The hours pass by and the landscape still remains monotonous. We pass a dark hill of schist with a spring at its foot, and then the light pink quivering tints of the desert plain come back again. A country like this is uncommon in western Tibet, where the mountain ranges are usually pressed together into innumerable folds.

About 150 wild asses disport themselves at some distance

to the south side of our route, where, no doubt, there is grass. They lie down in herds or feed singly or in pairs. But they are always charming to look at as they skim like ships over the sea of the desert. When the dust-spouts pass over the herd they look like the smoke of burning vessels.

At length tents appear. They are pitched at a height of 15,138 feet among the fresh-water ponds of Luma-ringmo. It is like anchoring in a water channel in the midst of an archipelago. The mountain ridges stand up on all sides like holms, seeming to hover a little above the ground owing to the mirage.

CHAPTER III

OVER THE INDUS AGAIN

ON September 19 our march ran due west.

" What is that curious erection ? " I ask the guide who always walks beside me, as we pass twelve upright stones a yard high near a deserted camping-ground. One need not be an archæologist to perceive that they have been set up by human hands.

The Tibetan turns his head and replies : " There is no one in our country who knows what they mean."

Probably they have stood there for ages and are memorials of the time when Buddhism was introduced into Tibet. Some powerful chief had perhaps placed his tent there, or human sacrifices were offered between the stones to the dreaded spirits which inhabit the mountains and lakes.

An interruption occurred in our monotonous journey as we rode by two projecting black cliffs of porphyrite and volcanic tuff. I held in my left hand a folding cardboard case to protect the loose leaves on which I drew the daily course and the adjoining topography. With the right I was marking on the map the last bearing I had taken. Consequently the horse was left to his own devices. A violent gust swept over the plain and the map sheets began to flutter and flap. The small shaggy black animal from the Gyekung valley which I rode was frightened out of his senses, bolted, and sped like an arrow over the gravelly soil. I was about to thrust the map case into my leathern vest for safety when a crack in the ground caused the

horse to swerve suddenly to one side, whereupon the saddle turned and I shot head downwards to the ground, where for the fraction of a second I saw brilliant fireworks. The Indian cork helmet I wore was crushed flat but it saved my head. My left temple bled and my goggles were bent up. When I had recovered a little from my consternation I got up cautiously and stretched out my arms and legs to make sure that nothing was broken. I might easily have been killed or have broken a leg, and then, patched up temporarily, I should have had to spend a full month in a waterless desert.

The horse came back at last to his comrades, breathless and trembling, with froth on his bridle and sweating flanks. The saddle hung loosely under his belly, and the dangling geological wallet had no doubt helped to alarm the animal. He had certainly done all he could to get rid of me, but nevertheless we rode on together as if nothing had happened. A slight headache, a swollen eyelid, and a purplish ring round the left eye were the only results of my somersault.

The boundless plain is before us, bestrewn with fragments of lava, tuff, and porphyrite polished by the wind. From a spoon-shaped swell in the ground I let my eyes roam over the hopelessly dismal country we have crossed. There are seen the small lakes, narrow and bright like a sabre blade, in the midst of extensive plains bounded far to the east by the dull pink mountains of Yumba-matsen. The spring by which we pitched camp 244 at a late hour is called Sariyol.

Next morning a thick veil of mist lay over the land, making all the colours faint and the outlines indistinct. We rode over slopes of detritus and again approached the watershed of the Indus, which we soon crossed by the Bokar-la pass, 16,989 feet high. Here, then, we left the enclosed basin and came on to ground which is drained to the sea. The view from the pass embraces an enormous extent of country. We still looked in vain for tents and flocks. Nothing could be seen but stone, sometimes as

rock *in situ*, sometimes in pebble slopes, in heaps of weathering products, or accumulated in valley bottoms. No verdure adorns the flanks, no streams glisten in the sun. Here all is empty, dead, and dry, and one can understand why the source-stream of the Indus which drains this country has so little water.

From the Bokar-la a path runs down at first steeply and then with an imperceptible fall to a valley where the water of a few springs collects into a winding brook. The valley gradually contracts between its walls of quartz porphyry, and beside it rise terraces of erosion, more or less continuous, which are often twenty feet high, and testify to abundant precipitation in earlier geological periods. We encamped at a spring near the point where this side valley opens out to the Indus valley, and the usual fuel, furnished by the herds of the nomads, was not wanting.

We had neighbours also. One of our guides took Ishe to a hidden tent camp, and he soon returned with two natives and a grand supply of sweet and sour milk. Here we were again in known country. In the year 1867 two of Colonel Montgomerie's pundits explored this country, and in 1906 Mr. Calvert, employed by the Indian Government, crossed the region on his journey from Gartok to Tok-jalung. The district round the uppermost Indus is named Singtod, and lower down lies another, Singmet, that is, the upper Indus district and the lower, for Singi-Tsangpo is the Tibetan name for the Indus, and Singi-kabab is the source of the Lion river. A day's journey down-stream is a small temple inhabited in winter only by a solitary lama. He must be a philosopher, poor man! How dreary and comfortless his life must be when the frost crackles in the rocks and a snowstorm howls round the corners of his dwelling! But spring will come at last and then he can go out again. It is a consolation to know that he is not walled up in darkness like the monks in the grottoes of Linga.

During the night our caravan animals stampeded down

the valley pursued by wolves. The alarm was given, the men followed the track, and came up just in time to save the horses and mules. Two hours later they were laden again, and the train descended the Indus valley which is enclosed by rather high mountains. The rocks on the left side are steep, and the river, invisible at present from our road, skirts their foot. Here and there we cross a rivulet trickling down to the Indus. A tent stands close to the river, a little farther off seven close together, and then again three. Here there are men at least.

A herd of yaks is grazing on a slope. What can the animals find to eat there? I cannot perceive the slightest tinge of green. The velvety yak grass hides itself among the stones, as also the mosses and lichens which the yaks lick up with their tongues rough as graters.

The place where our loads were again removed from the animals' backs, and where we set up our camp 246, is called Hlagar. Here the Indus takes a sharp bend, turning northwards through wild picturesque rocks of porphyry. My airy dwelling was set up on the brink of the right bank, and from my tent I could enjoy the sight of the proud river rolling its crystal clear water noiselessly among the mountains.

A stone's throw away stood two tents, and the inmates could not do enough for us. So we lived as princes in this wild lovely country, which seemed to us the more charming because we had of late seen nothing but desert. The dogs, which had long been on short rations, were not forgotten. Tundup Sonam brought partridges in abundance to the kitchen, and I preferred them to the perpetual mutton. Sour milk was to be had in gallons, and bread was baked in yak-dung ashes. Could a man fare better in such a country?

The day was glorious, the air in the deep valley warm and quiet, the temperature 55.6° at one o'clock, and 54.3° in the river. Now and then a puff of wind came down from the nearest ridge.

Two chiefs bearing the title of Gova appeared before my tent with tongues protruded and polite bows.

"I am glad to see you; be seated," I say to them.

"We are come to serve you to the best of our power, sir; you have only to command and we will obey."

"That's well. The men who have brought us here with horses and yaks from Yumba-matsen return in the morning to their tents. I shall therefore need horses and yaks and fresh guides who are thoroughly acquainted with the country on the way to the Jukti-la."

"Sir, we are sorry to say that yesterday the Serpun came here from the gold-diggings at Tok-jalung and was in great haste to reach Gartok, so we had to give him all the horses at hand. But if you will put up with yaks for riding and transport, you shall have as many as you wish."

I thankfully accepted the offer of yaks, and in two minutes we were as confidential as friends from childhood. They were ready to talk and had no secrets. I fear, however, that the information would not be so interesting to the reader as to myself, when the Tibetans of Hlagar spoke of their habits and their migrations. From time to time they go off to the salt lake Tsak-tsaka, five days' journey to the north-east. There they break up the salt, pack it in sacks which they fasten on their sheep's backs, and return to Hlagar to rest a while, and then continue their journey for nine days to Gyanima.

The road between Tok-jalung and Gartok is a *tasam* or post-road for riders, as the nomads informed me. Therefore they live all the year in Hlagar, to furnish horses to travellers of importance. Another road runs down the Indus valley past the tent village Pekiya and the mouth of the Langchu river as far as the confluence of the Gartong, the southern branch of the Indus. The Indus has only a slight fall all the way; no cascades and rapids disturb its peaceful course.

At Hlagar, situated at an absolute height of 15,328 feet,

the Indus freezes over at the beginning of winter, but the water of permanent springs gurgles under the ice. About midwinter snow sometimes falls so thickly as to form a layer four inches deep. The cold is sharp but not so intense as in Tok-jalung. The summer rains are seldom so heavy that the river overflows its banks and cannot be forded. At the time of our visit the Singi-kamba, as the Indus is called here, flowed in two separate channels, which together discharged 212 cubic feet of water per second. The largest arm was at most 16 inches deep, and the average velocity of the water 26 inches a second.

On the morning of September 22 seven strong yaks grunted in camp 246. Some bore loads, others were to be ridden, and I received a well-rested horse. Rupees chinked in the black paws of the weather-beaten mountaineers, and the nomads of Gyekung set off to return to their home. We bade a friendly farewell to all, and with two young guides splashed through the famous river, so insignificant here near its source, and yonder, where its huge volumes of water roll over the plain at the foot of the Himalayas, so gigantic.

Throwing a glance north-north-west we see the Indus valley disappear among its mountain ranges. Our road to Gartok runs up the side valley Terruk. The sharp-edged porphyritic detritus that covers the ground thickly makes our march very trying. We are therefore glad to find that the valley is short and that the path has imperceptibly mounted to the pass Terruki-la (15,990 feet), where granite is found on the saddle. The wind has free play on the summit, and the pennants of the pass cairn crack like whips.

Here the country is extraordinarily dissected. The next valley, excavated in porphyrite and higher up in granite, leads to another pass, the Sertsoki-la, and beyond a valley trough there is a third, the Dotsa-la (16,552 feet). Camp 247 is pitched not far from its ridge at the Dotsa spring.

A splendid panorama to the south-west and south-

south-west attracts the eye irresistibly. Dark and gloomy, but softened by the distance, a mighty range with pyramidal snow-crowned domes rises under the setting sun like the back scene of a theatre. It is the Trans-Himalaya. The sun declines, and the snow-fields, just now glistening like metal, vanish beneath the sharply defined outline of the crest.

The evening glow has paled. Another night creeps on from the east. The moon in splendid majesty pours its cold silvery light over the silent land. The background of the Trans-Himalaya appears only as a faint haze, but the firn-fields illuminated by the moon seem to hover like white clouds on the margin of the horizon.

The wind has fallen and we seem to miss something. Deep silence lies over the mountains. My tent looks out on interstellar space, boundless emptiness. My men are still talking in low tones. The yaks tethered to a rope scrape from time to time their horny callosities with their teeth. Sometimes a dog barks and the dung crackles as the fire blazes up again.

But soon all is still. The men are tired and lie down to sleep. The yaks slumber and dream. The dogs curl themselves up, poking their noses under their tails, and the fire goes out from lack of fuel. The silence is oppressive and uncanny. There is something grand in such a night. We sleep as in a temple hall ready to awake on the threshold of eternity.

On September 23 we directed our steps still towards the west-south-west through a rugged weathered country where quartz-porphyrite, porphyry, and basalt form a labyrinth of small ridges, crests, and saddles. Here and there nothing is left of a disintegrated hill of rock but white coarse-grained sand. To the north, however, lies a wide plain covered with detritus which makes it look as dark as the Kevir desert in Persia. Far to the north this plain is bounded by the chains which enclose the valley of the Singi-kamba.

Hleri-kunglung is a dark cone, Lumbo-seju a larger mountain of a reddish colour, both to the south. They raise their heads like signposts or lighthouses above the irregular country, and it is many hours before we have got past them. The Trans-Himalaya rises up in the south-west like a huge wall, looking down with contempt on this weathered and dried-up battlefield where former mountains have struggled in vain against the forces of the atmosphere, and where now only isolated hills of harder rock withstand the process of disintegration that levels all before it.

We make a long march to get across this new desert zone as quickly as possible. The ground is firm enough and is covered with fine gravel and coarse sand; a better riding track could not be wished. We look in vain for water, and animal and vegetable life is also absent; only a contented lizard occasionally darts over the sand. The temperature is 59°. Not a cloud floats in the sky. No wind-driven dust obscures the view. As far as sight can reach, the mountains stand out sharp and clear.

Now the country in the direction we are travelling is as level as a sheet of water. One guide marches in front of the caravan, a ragged, good-natured old man. He has just delighted us with the information that this desert plain will never come to an end, however vigorously we may march. Well, then, we may as well rest for a quarter of an hour and refresh ourselves with the cold milk we have brought with us in a can. I search the horizon with my field-glass. Nothing living can be seen. Wild asses have left no tracks and antelopes no longer show themselves. We are the only living creatures in this desert; even ravens shun it.

We do not follow a path. Where our train moves along no one has yet travelled. The old man at its head says that it is all the same where we walk provided that we do not lose sight of the conical and pyramidal mountains to the south. The scattered footsteps of travellers are soon

swept away by the wind. The name of the desert is Chaldi-chüldi.

A dark hill rises in the distance, the end of the day's journey. It seems to be out of reach; as the hours pass by it grows very slowly larger. But patience overcomes all resistance; we ride past the hill and perceive on the other side an oasis, Nyanda-nakbo, where luxuriant grass grows round a small swampy lake. Smoke rises alluringly from the smoke vents of half-a-dozen black tents, and two Indian wool caravans are resting at the spot.

As soon as my tent is ready I send for the Hindus to question them. They come from Rampur and have bought wool in Gertse, which they will carry to Gartok and India on five hundred sheep which they have also obtained in Gertse. They have paid two rupees for each sheep. About sixteen Indian caravans in the year are said to fetch wool from Gertse, and no doubt their profits are large.

The Gova of Nyanda told us of an attack made by robbers two weeks before on a nomad community living in seven tents. Eight scoundrels, armed with knives, sabres and guns, fell upon the village under cover of darkness. The inhabitants did not even attempt to make a defence, but fled into the mountains as hard as they could run. When the band retired they carried off with them everything that was not immovably fixed, all the eatables, all the clothing, thirty pots, cans and dishes, besides 740 sheep and 69 yaks. They left scarcely anything but the bare tents and the dogs. The plundered nomads were living in the direst poverty, wandering through the country and begging from tent to tent. But vengeance was not asleep. Sixteen horsemen were on the track of the robber band. Large herds of yaks and sheep could not possibly disappear among the mountains without leaving a trace. The disturbers of the peace would soon be caught. In such a case there is no talk of pardon. The heads and hands of the felons are sent to Lhasa.

Next morning four women from the pillaged tent village came to me, and were thankful for the presents I was able to give them.

A short day's march through pathless country brought us to the bank of the brook Jukti-loen-chu. This descends from the great pass on the Trans-Himalaya which still separated us from Gartok. There is a choice of three passes, our guide informed us—the Jukti-hloma and Jukti-changma, or the southern and northern Jukti passes, and the Lazar-la lying a little to the north of them. The roads over them soon unite, however, on the southern side of the crest. In the middle of December all three are closed by snow, and then it is impossible for four months to cross the Trans-Himalaya in this neighbourhood.

There are, however, other routes for those travellers who wish to go from Nyanda to the lower Gartong. They follow the foot of the mountains north-westwards and make use of the low sand-covered pass, Pele-rakpa-la, which is never rendered inaccessible by snow. The Lapta-la is a fifth pass lying still farther to the north-west. And lastly the breaching valley of the Indus can always be traversed, and thus all elevations are avoided.

It is plainly evident that the main chain of the Trans-Himalaya, which here rises between the two branches of the Indus, collects almost all the moisture brought by the south-west monsoon which has not been intercepted by the Himalayan region. We have seen ourselves that the land to the north-east of the Trans-Himalaya is a real desert, and we are no longer astonished that the Singi-tsangpo, the head-stream of the Indus, is unable shortly after the end of the rainy season to collect more than 212 cubic feet of water per second.

CHAPTER IV

OVER THE TRANS-HIMALAYA TO GARTOK

THE morning of September 25 broke clear, cold and calm, and the 28 degrees of frost in the night had covered the quiet stretches of the brook with bridges of ice which rested against the stones lying in the bed. But as we moved slowly up the valley between walls and buttresses of granite and porphyry, we soon met more water which the morning sun had released from its fetters on the heights and which made the blocks of ice a night old ring out.

Here and there we see a spring opening with water frozen by the cold. Deserted camping-grounds indicate visits of nomads and pilgrims. Often the pebbles cease for a short distance, and moss and fine alpine grass form a carpet under the hoofs of the animals, over which the caravan moves noiselessly. There marmots have their holes.

The wild yak shuns the desolate region we have left behind us, but here, on the heights of the Trans-Himalaya, he finds a refuge and the pasturage and cold which suit him. A noted hunter from Nyanda had lately wounded a yak bull on the slopes of the Jukti pass and had nearly paid for it with his life. Foaming with rage, the animal had attacked the man with his horns, and the hunter only just succeeded in saving himself by running between two blocks of stone so close together that the yak could not squeeze through.

The valley expands into a steeply rising trough. At Changsang-karpo, where the rock is light-coloured porphyry,

the path is charming. A giant seems to have thrown down a cartful of huge blocks to close the way, and the path winds up in zigzags between the blocks to the pass. Often the animals can hardly squeeze through the narrow openings. Some ascents are so steep that it is preferable to walk. Vainly we look upwards, hoping that the cone will soon come to an end, but it continues to rise in front of us, and our train ascends over more piles of blocks, and with repeated interruptions, to the Jukti-la.

Our hired yaks march lightly and nimbly, and I constantly wonder that the horses do not break their legs in the dark, treacherous holes that frequently yawn between the stones. Sometimes we find under a boulder a frozen green-shining pool of fair size. To the south two steeply hanging glacier tongues push their way between dark rocky shoulders on the crest of the range. The ice of the glacier-fall shines like polished steel.

The ascent becomes gentler, but we have still a long way to go north-westwards before we reach two small cairns with fluttering streamers and strings. They are at the top of the Jukti-la. Here the west wind blows half a gale, raw and freezing. The caravan must continue its march at once and move down into the sheltered valley on the other side. I remain behind with three of my men on the pass to determine its height above sea-level. It is my fifth crossing of the Trans-Himalaya. The Jukti-la has indeed been crossed by Mr. Calvert and the pundits, but I wish to obtain an accurate reading of the height with a boiling-point thermometer. All I have to do is to bring the water to the boil with the last drop of spirit that the lamp contains.

Tundup Sonam and Rabsang formed a screen with their skin coats, I put a light to the wick, the water in the vessel began to hum and sing, and soon the mercury rose in the tube of the thermometer. Then the lamp went out. But if I had to wait there all day I would ascertain the height. Never again would fate bring me to the Jukti-la, and

if I missed this opportunity I should bitterly regret it afterwards.

Rabsang had good lungs. He had to hurry after the caravan and fetch me some stumps of stearin candle. It is impossible to run at a height where one is subject to giddiness and among nasty boulders of porphyry, so we had to wait patiently. I had only a waterproof to protect me from the cutting wind. I crouched down with my back to the wind and my body leaning forward, hummed an air, and was nearly frozen. Tundup Sonam and the Tibetan guide squatted close together, and my riding horse stood half asleep with hanging head, his tail and mane flapping in the wind.

An hour passed and the second also came to an end. These hours are terribly long, when you feel the blood slowly congealing in your veins until at length you can hardly move a limb. At last shuffling footsteps were heard, and after a time the boiling-point of water was properly determined. The Jukti-hloma-la is 19,110 feet high, more than 3000 feet higher than Mont Blanc, and it is the second highest pass I crossed on this journey. The highest of all was the Ding-la, 19,308 feet.

After such a contest with the wind we packed up our belongings with satisfaction. I was too stiff to ride and went on foot to loosen my limbs. It is impossible to walk quickly at such a height, for the air is rare and the heart beats as if it would burst. I soon took to the saddle again. The wind was straight in our faces, shooting down as if from a spring-board.

A small side valley opens on our right.

"What is the name of this valley?" I ask the guide, as usual.

"It is the way from the Jukti-changma-la," he replies. Just then there appears one of the men from Rampur, leading the van of the sheep caravan.

"Why did we not take the same road as those men?" I ask.

" The Jukti-changma is partially frozen over and horses cannot cross it, while it is nearly impossible to drive sheep through the boulders of the Jukti-hloma."

The Dunglung-chenmo valley opens on the left, displaying snow-fields and insignificant glaciers in the background. We pass along the right side of the main valley. All the ground is covered with boulders and débris of granite and porphyry which seldom leave room for small patches of grass. The valley leading down from the two Jukti passes is deeply sculptured and is hemmed in by wild rugged walls of rock. It is lifeless as a desert; neither wild nor tame animals are to be seen. The guide tells us, however, that there are many wolves and lynxes in the neighbourhood.

After the awful heights with their cold and wind it was delightful to dismount at Dunglung-sumbo (16,966 feet), where the camp was ready for us and the brazier spread a welcome warmth through my tent. We had descended 2144 feet, and here the valley Lazar opened out, which comes down from the third pass, the Lazar-la.

September 26 was our last day on this excursion. We were to go down to Gartok, where letters from India awaited me and I should at last receive news from Sweden and my home. Therefore we started earlier than usual, and rode at a smart pace down the rather narrow valley. The rocks on the right side fall steeply, and the brook from the three passes murmurs at their foot. After a while the last ridges move aside, and through the portal of the valley mouth is disclosed a view over the great valley through which the southern branch of the Indus, the Gar-chu or Gartong, flows in a north-westerly direction. In the background, beyond the river-bed, rise mighty mountain masses belonging to the Himalayas.

At Hlande-tsogsa four conical stone heaps are piled up beside the road, but they do not breathe a single " Om mani padme hum." The guide says that the place has a bad name as a haunt of evil spirits.

We find ourselves in the valley mouth, where the porphyrite stands in vertical dikes. Now Gartok (14,656 feet) comes in sight, the capital of western Tibet and the residence of the two Garpuns or viceroys. It is a village of the simplest kind, some white and black tents besides several modest huts. But to us, coming from the desolate regions about the source of the Indus, Gartok seems like a capital. Temperature 57°! Delightful after all the cold we have endured during the past days. Tents and huts grow slowly larger, the Jukchi brook vanishes to the left, and we are down on the level valley bottom. Shaggy dogs bark us a greeting, and I am soon sitting in my large comfortable tent, and reading my eagerly expected letters.

But the new equipment and the chests of silver coin I had ordered from India had not arrived. A wearisome time of waiting was in prospect for us. Autumn was come, and winter would soon set in in Tibet, and day after day passed by, but the consignment from India could not be heard of. I read my letters over again and studied the year-old newspaper, not even skipping the advertisements and time-tables. I drew and photographed, sat over my maps and forged new plans. The authorities would prevent me from tracing fully the main lines of the Trans-Himalaya. Well, I would do it. I was forbidden to return into unknown country. I would go there all the same. Winter, too, would place obstacles in my way. Then the new caravan must march through piles of snow to reach its destination, and enable me to fill up the blank space still covering the middle part of the Trans-Himalaya.

In my spare time I visited new and old friends. Chief among the latter was the great merchant, Gulam Razul, for whom I afterwards procured from the Viceroy of India the honorary title of Khan Bahadur. It was he who arranged my new caravan, providing me with men as well as animals and provisions. He had several roomy tents in Gartok, furnished with carpets and divans and heated with iron

stoves. They were full of bales of cloth, and their walls were lined with large iron-bound chests containing Chinese silver coins, Indian rupees, gold-dust, and turquoises. A smaller tent was his mosque wherein he spent his hours of prayer. Round the tents ran a wall of brick-tea sewed up in bales. Every bale was worth 70 rupees and he had hundreds of them.

Gulam Razul told me various interesting details of his trade. His caravans bring beads, coral, and turquoise, English cotton goods and other wares to the markets in Gartok and Gyanima and to Lhasa. Carpets, felt rugs, Russian woollen materials, silk fabrics, and nephrite are purchased in Eastern Turkestan, and are transported over the Karakorum to Leh and Tibet. From Lhasa he imports brick-tea. Tibetan wool manufactures, Lamaist drugs, and other goods into Ladak. In Tok-jalung he buys gold-dust, which is subsequently sold again in Leh and Lhasa. During the fairs in Gartok and Gyanima, which are held in the three summer months, Gulam Razul sells goods to the value of 25,000 rupees. His exports to Lhasa amount to 40,000 rupees, and his imports from there to 35,000. Gulam Razul's family holds the Lopchak monopoly, a privilege of trade between Kashmir and Lhasa, in which is included free transport on Tibetan territory. The Tibetans enjoy a similar monopoly in the opposite direction. The distance from Leh to Gartok is reckoned at twenty-two caravan days' marches, from Gartok to Shigatse forty-five, and thence to Lhasa eleven.

Smaller traders from Ladak resort to Gartok with dried apricots and raisins, which they transport on asses, and barter for sheep's wool.

Dava Shah was a prominent merchant from Leh who was about to travel on to Lhasa. He visited me in my tent and asked if he might lend me 3000 rupees in cash, which made his chests heavy. But I had already sent for money to India and had therefore no need to avail myself of his kindness. He would have been glad to avoid the

risk and trouble of transport, and he knew that the loan would be repaid to the last anna.

One day I betook myself to the small temple of Gartok, the Gar-yarsa-gompa, a cloister with eight monks under the control of Tashi-gang. The temple hall is a small dark closet. A red-painted *tanka* hangs before the altar and the statue of the Palden Hlamo is hidden among bunches of ribands and rags. The water in the metal cups on the altar table was frozen to the bottom; no other offerings are presented to the gods in this cold sanctuary.

It was much more comfortable in Gulam Razul's dwelling. He sat on a divan in the middle of his large tent, smoking his silver-studded narghileh, and receiving his guests with amiable dignity. We spoke Persian, joked and laughed heartily. Tea was handed round in Chinese porcelain cups, and the raisins, apricots, and slices of bread which accompanied it on pewter plates from Leh. One faggot after another was thrust into the stove, which became glowing red and crackled, spreading an invigorating heat through the tent. Some fat, greasy, good-tempered traders from Lhasa squatted in a corner arranging their silver *tengas* in piles for counting. The next day they were returning to the holy city, and now they were preparing to pay their debts before leaving. Two Hindus were likewise waiting on the great pasha of Gartok. They were extreme revolutionists, and poured forth the vials of their wrath on the English in India. I let them chatter for a time and then gave it them hot and strong, and they begged me earnestly not, for heaven's sake, to betray their rash speech. Political babblers, who call themselves heralds of freedom, are the same in all lands.

In these days of expectant waiting we found relief even in folklore and legends. In ancient times a lama of the Pembo sect and an orthodox lama met one day at the foot of Kang-rinpoche, the holy mountain. There they made a bet together. The one who should reach the summit of the mountain when the sun gilded the peak on the following

morning should for ever retain possession of Kang-rinpoche. The heretical lama started at once up the southern flank, while the other lay down to sleep. When day dawned his servant perceived his master's rival close to the summit and waked the sleeping monk. He answered with a smile, "Keep calm, let the sun rise first." And when the sun appeared above the horizon the orthodox lama ascended on a sunbeam to the summit, while the Pembo lama was floundering painfully through the firn snow.

A dark vertical line of bare rock is still visible in the snow on the southern flank of the mountain. It shows the track of the heretic and does not reach quite to the top. For as the climber was approaching his goal he threw a glance up to the apex of the mountain and saw the other lama standing on it. He was so astounded that he fell down the slope, losing his prayer-drum, which his rival seized to play an accompaniment to his song of triumph. The defeated monk humbled himself, and begged his successful rival to give him at least a souvenir of the holy mountain. The victor took a handful of snow from Kang-rinpoche and threw it to the summit of the Pundi mountain, which stands to the north of Tso-mavang. The Pembo lama went thither, and since that time there has always been a small patch of snow on the Pundi. When this snow disappears at the end of time, then will the snow mantle of Kang-rinpoche also melt away and the earth will be destroyed.

In Gar-yarsa, where we were staying, the two Garpuns dwell only in summer. In winter they live at Gar-gunsa, a few short days' journey down-stream. Though the difference of height is only 591 feet, Gar-gunsa (14,065) has a much milder climate and, as a rule, little snow.

I determined for the sake of a change to remove my camp to Gar-gunsa. I paid no farewell visits to the viceroys. One of them was ill and the other had not deigned to return my visit on arrival. He had, however, to provide me with yaks of burden, and two of his men

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were to accompany me all the way to the frontier of Ladak, to see that I did not run off along forbidden roads.

It is pleasant to pack up my things, shake the dust off my feet, mount my horse and ride away from the small, miserable, windy Gartok, where soon only two families will be left to pass the winter in their huts.

Not far from the town of Gartok we ride through the numerous channels of the Gartong. Two of its arms are quite small, one of them is frozen to the bottom and the horses slither over the ice, while the others still fight against the cold of night, and have only strips of ice along their banks. The bed is broad, though at this late season it contains little water. But we perceive that it can hold a considerable stream when abundant rain falls in late summer. Along the left bank runs an erosion terrace 13 feet high. The road passes along the top and the river vanishes for a time from our sight.

The valley is broad and grand. On the right we have the Trans-Himalaya, on the left the Tibetan slopes of the Himalayas. Small, boldly excavated side valleys display their portals on both sides. Flat cones of rubbish spread out like fans from their openings, and shallow runnels, now dry, wind downwards to the river.

The valley contracts. The Himalayas and the Trans-Himalaya stretch out hands to each other. A narrow passage appears in front of us which the river has carved out. This passage is called Nima-lung, and here we pitch our tents. Here all the arms of the river are collected into a single channel, and the water glides between terraces 60 and 100 feet high, as it is slowly sucked into the narrows. Where the river again divides below these narrows I might drift with the current down to Gar-gunsa. The young Eurasian, Alexander Robert, who had waited for me at Gartok, had become a skilful boatman on the holy lake. He could steer the boat while I marked down the course of the stream on my map. A map survey of the valley had

been made by Englishmen, but the river with all its windings was not drawn on it.

We would first make a short trial trip. The boat was put together and manned, and the current carried us slowly and easily towards the narrow gorge. But at the entrance there was a change. Here we darted like an arrow past the banks and entered the rapids; now it was too late to change our minds, and we had to go on as the water was sucked in as into a funnel. We warded off the boat with oars from the threatening blocks covered with smooth or foaming bells of clear water In one sharp bend the boat could not turn quickly enough with the current and rushed at full speed on to a humpy block of stone where we were within an ace of capsizing. But before we were aware of our danger the stream had released the stern of the boat and we were again afloat rushing madly through the wild gorge.

Now we heard the roar of a rapid. We tried with all our might to hold back the boat with the oars, but the current was too strong, and we neared the danger at a giddy speed. One glance sufficed to convince us that it was impossible to thread our way safely through the blocks which formed a barrier all across the bed. This waterway was not made for canvas boats. The boat would either be overturned or torn to pieces. Just above the rapids the current was less rapid and gave us time to force the boat with firm thrusts behind a block at the bank, whereupon Robert jumped into the water and drew our small craft ashore. This much our trial trip had taught us, that it was wisest to keep on dry land for the present.

During the night we posted a strong watch, for wolves swarmed in this country, and at Gartok one of our mules had fallen a victim to a pack of Isegrims.

CHAPTER V

TO THE CONFLUENCE OF THE INDUS ARMS

THE road from Nima-lung winds through dry clefts between rocky hills up to the Chagring-la, a small swell on which a streamer pole is set up on a heap of stones. The view from it is hardly more extensive than from any other point in the valley. Far to the south-east are still seen the mighty mountains standing beyond Gartok, and to the north-west we perceive a succession of spurs which we shall pass one after another. The valley is now broad and open, and the Gar-chu, beside which we are travelling, does not glide so noiselessly as farther up, but murmurs gently and forms rapids which indicate a greater fall.

The valley lies before us in solemn stillness as on a Sunday; men and herds are absent, and all is deadly quiet and as deserted as though a hostile army had marched plundering through the country. A *mani* wall and the road to Ladak are the only signs left by human hands and feet. At Namru alone meagre bushes grow among rank grass, and a field on which barley is sown in favourable years is the first specimen of agriculture we have seen in western Tibet.

In the background of the Shinkar side valleys rises a dark mountain mass with snow-covered summits — a passing glimpse of the huge crest which we shall follow to Ladak and which has been named the Ladak range by English topographers. It forms the watershed between the Indus and the Sutlej. In former times its slopes and steep walls have been washed by tremendous floods of

rain, as is proved by river terraces 160 feet high which we notice at the mouth of the Shinkar valley.

Chusan, the "warm water," is a name we frequently meet with in Tibet. Here also a group of hot springs bubble out of the ground close to the left bank of the Gar-chu and 6 feet above the surface of the river. One of them forms a small open basin, the clear water bubbling up at its bottom; it has a temperature of 141°. At the orifice of another spring the water is boiling, and therefore must be heated to more than 212°. A third shoots up like a tiny geyser, and its eruptions follow one another at intervals of a minute. The water is collected from all sides by small runnels into a large basin, in which invalids bathe to restore their health. A stone wall affords protection against the wind, and another serves as a dressing-room. We encamp just beyond the springs on the depastured meadow of Luma-ngoma (camp 253).

The valley bottom stretches before us as level as a floor as we move on next day towards the north-west. The ruins of two huts are the old Gar-gunsa, the guide says. At one time the river of a side valley flooded the place, and Gar-gunsa was therefore removed farther down the stream. We see its tents and fences of brushwood in the distance, but it is a long way to it over an extensive plain covered here with sand, there with grass, with bushes or swampy patches. Here are grazing a number of yaks and horses, and we perceive that the winter migration from Gartok has commenced.

In Gar-gunsa my long period of waiting came at last to an end. The post came from India with provisions, money, arms, and ammunition, and on November 9 we were able to start for Ladak.

Now the caravan is again large and imposing and winds like a dark snake over the grey ground. In Gar-gunsa I bought mules from Gulam Razul. They are allowed to travel without loads that they may save up their strength for the hard winter campaign which awaits them in the

north. Hired yaks carry all our baggage, and the Tibetan escort, two horsemen of the Garpuns' guard at Gartok, arrange everything at the camping places. They really accompany us to watch our movements, but I do not mind that, so long as we remain on the great high-road, and I have no intention of giving them any trouble—at least not for the present.

I ride my little Ladaki horse, which after the long rest is fresh and plump. Our four-legged escort consists of a whole pack of dogs of all kinds, our own caravan dogs and other freebooters and tramps which have made friends with them in Gartok.

The valley slopes down imperceptibly to the eye; no obstacles come in our way, and the ground consists of the finest dust, on which grow tall yellow hard grass and *ombo* bushes peeled by the early winter. We therefore make quicker progress than usual. Two mules carry bells and sleigh-bells, which tinkle merrily to their tripping steps; from time to time are heard the shouts of the drivers, horses neigh, yaks grunt, the dogs dart like rockets after startled hares, and I draw the monotonous road to Ladak on the map sheet in front of me.

Here stands a solitary tent, there two *mani* walls remind the passer-by of the wanderings beyond the valley of the shadow of death, and here again come shaggy yaks carrying fuel to Gar-gunsa, where the two Garpuns are expected to arrive this evening.

The train comes to a halt. Ah! here are two branches of the river in front of us, frozen hard as stone. A path on the ice is strewn with sand and then we move on again. The road crosses the valley to the foot of the mountain on the left side, where some lively wild asses look down on us with curiosity from the top of a flat cone of detritus at the mouth of a transverse valley. The level bottom of the main valley has a yellowish tinge from the strips of meadow between the arms of the river, and here and there is a dark patch of bushes. The weather is splendid, clouds and

winds have taken a holiday, summer still lingers in the sun, but my right foot, which is always in the shadow of the horse, is as cold as an icicle.

Tibetans have set up their tents at the spring Chiu, and we let our horses loose to graze, but at sunset they will be again tethered in camp. The neighbourhood is noted for wolves which attack cattle in packs. In the night gun-shots and loud cries are heard near at hand; some of our men are out driving off a pack of Isegrims. The night before a wild ass dashed into our camp mad with fright and tried to hide himself among our animals. His upper lip was torn off and red froth lay round his mouth; evidently he had only just escaped with his life. There are said to be two kinds of wolf in this country, one with a light grey, almost white, coat, the other dark grey.

From the Chiu spring we catch sight to the north-east of the gradually ascending flat pass Pele-rakpa-la, of which we have heard before. On the farther side lies the valley of the Lang-chu river.

At night my men were in high spirits. Grand fires flamed and crackled among the copses of *ombo* bushes, and the men, wrapped in their sheepskins, sat in groups as close as possible to the flickering fire. The brown weather-beaten faces beamed with pleasure at the thought that Ladak was near. In the bright yellow and red light the half-wild figures stood out sharply against the black night behind them. We felt that winter had laid its hand in earnest on the earth. By nine o'clock the temperature had fallen to 2.1°; terrible cold after the warm day. The air was perfectly still, the flame of my lamp showed not the slightest flicker, the tent flap hung limp and motionless, and the smoke of the camp-fires rose straight as a candle up towards the stars. The sickle of the moon hovered above the mountains in a cold blue winter sky; we should have light nights all the way to Ladak.

When I came out into the bright morning light after 41.8° of frost in the night, all the bushes and grass stalks,

tents, saddles, and chests, nay, even the yaks and horses, were covered with the whitest rime. I felt as though everything had turned into marble and would crack like glass if it were too roughly handled. But the sun soon destroyed the illusion, and when we continued our journey over the hard frozen ground, the landscape had assumed its usual appearance. The belt of vegetation remained on the right while the path ran over barren land bestrewn all over with granite débris. Here stood a *mani* wall, the letters cut out in its granite slabs silently proclaiming the holy words.

Farther on the ground becomes sandy and lumpy owing to the numerous tufts of grass, and the road skirts the foot of the screes of the Ladak chain. These cones spread out from the mouths of side valleys and succeed one another on either side of the main valley alternately as far as the sight can reach. Between their lowest margins the breadth of the level valley bottom is about 6 to 9 miles. The dark rocky gables which the Ladak chain sends out to the main valley form an endless perspective fading away in ever lighter and more airy tints in the far distance. Between them yawn the short narrow and gloomy ravines of the transverse valleys. Up on the left bank terrace we are at a higher level than the river and therefore have a good view of its winding course. On the other side rise the more hilly heights of the Trans-Himalaya, which are far lower than those of the Ladak chain. Therefore the rubbish cones also of the Trans-Himalayan side valleys are smaller. Such is the scene day after day. But these chains are both important main features of the physical geography of Tibet; the Ladak chain on account of the part it plays as a watershed, and the Trans-Himalaya as the true boundary range of the elevated country.

The main valley is singularly straight. Therefore, from a high detritus cone the sight can sweep far to the north-west, far beyond Demchok and the western boundary

of Tibet to the pink and brownish-red mountains which stand in Ladak. Beyond these mountains appear other summits in light steel-blue tones which we can only just perceive. In the foreground, and yet a good day's journey off, the monastery Tashi-gang is enthroned on a small rock in the midst of the valley. The air is so clear that distances appear insignificant. Lastly, we descry to the right the valley through which the Singi-kamba, the Indus proper, emerges from the mountains to join the Gar-chu. There the main valley expands into quite a plain tinged yellow by grass and spotted brown by bushes.

We soon reach the small village Langmar, where six or seven families dwell in black tents, protected from wind and cold by brushwood fences. To guard against the evil spirits which live in the air their dwellings are adorned with poles, strings, and streamers.

Scarcely has the sun gone down in the west when the night frost comes creeping on and penetrates everywhere. Then the ink freezes in my pen as I sit cross-legged on my bed entering my observations in my diary. Then the fires burn more briskly and a freshly filled brazier is more frequently brought into the tent. The thermometer sank in the night before November 11 to $-12.6°$.

On this day we made only a short march. Its goal was the point where the two head-waters of the Indus flow together. The Gartong or Gar-chu streams along slowly and quietly, but the Singi-kamba rushes furiously and gleefully out of its gate in the Trans-Himalaya. We pitched camp 256 on the grassy bank on the left side of the Gartong. I had a beautiful and uncommon view over large ice-covered expanses of water.

Now my task was to measure the two rivers. Perhaps the reader may think such work superfluous and uninteresting. But there he is mistaken. A hundred years ago only the Gartong arm was known and was supposed to be the true source-stream of the Indus. Afterwards a more northern river, the Singi-kamba, was heard of, but some

fifty years ago opinions were much divided as to which of the two rivers should be considered the main stream and which the tributary. In 1867 it was proved by Montgomerie's pundits that the Singi-kamba was considerably longer than the Gartong. But the mere length of the course is not decisive. The volume of water is at least as important. However, the example of the Tibetans was followed at that time, and the Singi-kamba was allowed to be the source-stream of the Indus. No exact measurement was undertaken. Therefore, I pitched my tents on November 11, 1907, at the confluence of the two Indus arms.

I could see that no easy task was before me, for the Gartong was fast frozen over save for a narrow channel in the middle. An opening was hacked out in the ice on our bank and then from the boat we attacked the ice sheet with spades and axes. We wanted an open passage across the river that we might measure the depth and velocity without difficulty. Scarcely was our channel finished before huge ice-blocks came down from above, stopping up the passage worse than before. The boat also was nearly torn to rags.

A change of scene occurred at noon. The ice-drift diminished, the blocks in the choked passage began to press and rub together, and the whole mass set itself in motion with a grinding roar and floated off down-stream. Where the bed was narrowest and the current swiftest the surface was almost free of ice. In a moment a rope was stretched across the river, and I measured the depth at eight points at equal distances apart, and the velocity at the surface, at the bottom, and half way down. The results showed that the Gartong was 190 feet broad, had a mean depth of 15.9 inches and a maximum of 30.7, flowed at an average rate of 11 inches a second, and discharged 231 cubic feet of water per second. A small branch behind a mud-bank brought the volume of water up to 235.5 cubic feet.

The Singi-kamba was divided into two arms near the confluence, and it seemed as if this river must form an extensive delta after heavy rainfall, whereas the Gartong is always confined to a narrow trench. The upper branch of the Singi-kamba had the following dimensions: breadth 30 yards; average depth 12 inches; maximum depth 20 inches; average velocity 26.7 inches, and the volume of water 200 cubic feet, per second. The dimensions of the lower arm were: breadth 107½ feet; mean depth 11⅓ inches; maximum depth 19 inches; average velocity 17¼ inches, and discharge 145 cubic feet, a second. The whole river therefore discharges 345 cubic feet of water, or 110 more than the Gartong.

Accordingly the Singi-kamba, the Lion river, is not only the longer but also the more voluminous of the two head-streams, and the problem is solved. Certainly it may be suggested that the dimensions given above only apply to late autumn and winter, for in summer and especially during the rainy season very different conditions may prevail. No doubt this is the case. The rainfall diminishes north-eastwards, and therefore more rain falls in the basin of the Gartong than in that of the Singi-kamba, which may be robbed of moisture by the Trans-Himalaya. The spring flood consequent on the melting of the snows is also greater in the Gartong. How often irregularities must occur in consequence of the direction of the wind and the capricious variations of temperature! In the meantime we may consider it probable that the Gartong carries during the whole year more water than the Singi-kamba, but we have at least discovered that the Singi-kamba is the larger stream when no disturbing influences are at work, when there is no precipitation, and when the temperatures in the two river basins may be considered identical.

The Singi-kamba traverses the Trans-Himalaya in a breached valley, while the Gartong flows in a tectonic valley between huge folded mountains. Therefore it is the latter which determines the direction of the united

Indus. From Gar-gunsa the Gartong skirts the foot of the mountains on the right side of the valley, but just at the confluence the Singi-kamba forces it over to the left side. The mud delta of the Singi-kamba fixes the position of the confluence.

After 25 degrees of frost in the night the river was covered next morning with a thin sheet of ice. Only a few small channels remained open, through which the current carried quantities of porous ice-blocks, which rang clearly as they struck the ice attached to the banks. Over the top of the flat tongue of land between the two rivers we saw the ice of the Singi-kamba hurrying down to the Gartong. Here the name Gartong is lost in the waves of its comrade, for the Tibetans name the Indus, as far as they know its course north-westwards, the Singi-kamba or Singi-tsangpo, the river of the Lion.

We rested here a day. In the afternoon all the shore ice and all the ground ice vanished, but quite by seven o'clock more blocks came down, and at night the ice made a noise like a sugar saw. The landscape presented a curious spectacle in the moonshine. The mountains under the moon were inky black profiles, the illuminated cliffs just opposite only faintly perceptible. The whole valley bottom between the two seemed to be full of water, and the drift-ice glided along like a moving pavement of glass sherds and glazed porcelain.

CHAPTER VI

IN DARK, DANK CLOISTER WALLS

On November 13 our train proceeds farther down the Indus valley, which has such a slight fall that the eye cannot perceive it. The river therefore flows slowly and peacefully, and its considerable breadth makes it look larger than it really is. Beyond the town of Leh it contracts in its narrow valley, and then becomes deep and impetuous.

Numerous springs well up along the road. Their rivulets are frozen up, and the ice sheets spread over the lumpy withered meadows. Occasionally a field appears surrounded by a stone wall and destined for barley cultivation, and there is no lack of *mani* rows with their prayers in stone. What is wanting in this terribly sparsely peopled and poor country, next neighbour to the fertile India, is human beings.

Right in front of us the monastery Tashi-gang gradually grows larger. Its walls are erected on the top of an isolated rock of solid porphyrite, which crops up from the bottom of the Indus valley like an island drawn out from north to south. As a whole it vividly reminds me of the village Yezdikast in Persia, and the fortified rock villages in Transcaucasia. The best view of the monastery buildings is from the east, and here, at the foot of the hill, lies the small wretched village of Tashi-gang, with its twenty low stone huts roofed with brushwood.

While the tents were being set up on the left bank of the Indus, I took a walk round the singular lama fortress.

Its dirty greyish-yellow and red walls slope slightly inwards; up under the eaves runs a border of the colour of hawthorn blossoms. The windows, too, have frames coloured red. The *lhakang*, or hall of the gods, is a little higher than the other buildings, and on its roof flutter the usual bunches of streamers and all the decorations that pacify the spirits of the air, fend off evil powers, and bring peace to the abode of the gods.

Before the eastern façade of the temple a long fine *mani* wall is erected; on the short side stand two round free-standing towers, and here and there are seen red and grey *chhortens*. The whole is surrounded by a moat 10 feet deep, interrupted only on the east where communication with the village is kept open. On the same side stands the main portal. It gives access to a court full of rubbish, offal, and savage, dirty dogs. A second open space is like the court of a Turkish caravanserai with two storeys of verandahs resting on wooden pillars. The *lhakang* has a small court of its own, also surrounded with verandahs and with small panels adorned with paintings.

All the monks that were at home, perhaps about twenty, followed at my heels, a silent troop, in the usual garments like Roman togas. Several faces were still rosy red, but many had lost their original complexion and were turning black under the influence of tea and butter, dirt, grease, and poverty.

As I mounted the steps to the temple hall the monks woke up, calling out to me that the hall was not open to strangers, and could not be shown without permission from the lords of Gartok. If I forced my way in, I should arouse the anger of the gods, and misfortune would befall Tashi-gang. Neither could I inspect the *manekang*, the room with the large prayer-mill, or the storeroom where the religious masquerade dresses and the drums, trombones, and cymbals are kept, for the prior had the keys and he was then staying at Gartok.

It was vain to tell them that I had already been admitted without difficulty into about thirty convents in Tibet.

"Well, then," they retorted, "as Tashi-gang is much the same as all the others you can very well do without seeing it." They were quite right—I should lose nothing by not seeing Tashi-gang.

"If you come again to-morrow, the fifty monks of the monastery will drive you off," declared a tall lama.

"You said just now that there were only twenty-five monks in Tashi-gang," I replied, and I rode down to my camp, which now stood ready on the river bank 200 yards from the monastery.

In the twilight my Ladakis started a tremendous fight with the villagers and the priests. Two of my men had asked to be allowed to buy straw for our mules, but the headman of the village had refused without any reasonable excuse. Then the Ladakis held a council of war, armed themselves with bludgeons and tent-poles, and moved out in close order against the inhabitants of Tashi-gang. I was just writing in my tent when I heard loud shouts and war-whoops from the village. I went out with my field-glass to find out what was the matter. The fight was in full swing, and it looked really serious. Stones rained down, clubs whistled through the air, and the sons of Ladak and Tibet beat one another heartily in a closely packed crowd, which now and then disappeared in a cloud of dust. It would have been a pity to disturb them while they were so hard at work. Sometimes a man was shot head foremost out of the struggling throng, but he soon got up and plunged again into the mêlée. After they had pounded one another at close quarters for three-quarters of an hour they seemed to grow tired of the game, for they separated into smaller groups, which had an inexhaustible store of abusive terms at their command. At length peace was restored and the whole party marched to our camp.

The heroes, breathless, dripping with perspiration and

with clothes torn, took up a position in front of my tent, each side shouting out its complaints and trying to drown the voices of the other. My men from Ladak maintained that the Tibetans had begun the quarrel, but the latter swore by all the gods of Tashi-gang that the strangers had attacked them with blows and buffets. I proposed to them that they should drink tea and rest an hour, and then settle the dispute by another combat in the moonlight. The side that was then victorious should be held to be in the right, and should receive its reward. But they had no stomach for this. They stood confounded and went away. A Tibetan with a bloody head was given a plaster for his wound, and a rupee was slipped into his hand. The feud had the excellent result that all the mules got straw.

There is a slight touch of psychology in this incident so trifling in itself. Rabsang had been most violent, for he was the strongest and wildest, and had no proper feeling. Therefore he got what he deserved when I scolded my men.

"As long as we were in the heart of Tibet," I said to them, "you were always peaceable and well-behaved and did no harm to the Tibetans. But now, when we are on the frontier, at the last village but one and the very last monastery, you do not control yourselves at all, but behave like robbers."

"Sahib," answered Rabsang for himself and his comrades, "we have so often been annoyed when the Tibetans have stopped you, that we have watched for an opportunity of giving them a thorough hiding for once."

"Why should the poor people of Tashi-gang suffer for the sins of others? Here no road has been closed to us, and no harm has been done to us. Oh no, I know you. Right in Tibet you dared not make a commotion, but here on the frontier of Ladak, and in a small miserable village, you have plucked up courage."

"Sahib," stammered Rabsang, "it was our last opportunity, and the main thing was that the people were Tibetans."

"You are cowardly fellows, nothing else. Off with you!"

So the heroes retired to their camp-fires where they sat together till late in the night boasting of their exploits. None omitted to tell the others how many Tibetans he had struck and where.

Whether the scrimmage had made a deep impression on the monks, or whether other influences had soothed their tempers, at any rate I was informed next morning that I should be welcomed in the monastery—without Ladakis, but I must make haste that I might look into the temple hall while the sun was still shining on the façade, for only from the threshold might I encounter the gaze of the gods.

I entered the small court. On the stone steps and in the anteroom with black draperies stood all the monks like a guard. I asked them to move aside a little that I might see the spirit kings, and the different pictures of other temple towns which decorated the outside walls.

Grey curtains hung before the doors. Seriously and hesitatingly an elderly monk came forward to draw them aside. The massive doors, with their quaint brass mounts and iron rings, were fastened, but the monk had brought the key and he opened the ponderous lock. After he had pointed out the place on the threshold where I was to crouch down, he made the doors turn on their creaking hinges, and the darkness of the holy of holies yawned before me.

I shook my head. The monk smiled and said, "Patience." Then some beams of light appeared, and when I had become accustomed to the scanty illumination I was able to distinguish the details. It was a small temple hall well kept with all its simplicity. A forest of painted *tanka* cloths with images of the gods hung down from the roof, reminding me of regimental colours in an arsenal, or of the trophies in an armoury. The *tankas* deepened the gloom of the interior.

As usual, an aisle passes through the hall up to the altar, bordered on either side by four red pillars draped with ribands and coloured hangings. There, too, are placed red divans on which the monks sit when they perform the Lamaistic service, and murmur the daily-repeated prayers. At the end of the aisle a pyramidal stand faces the altar full of offering-bowls of brass and small lamps fed with lumps of butter, their flickering flames struggling vainly with the darkness.

Yigde is the name of the principal god whose praises are sung in this sanctuary. He surmounts the altar, painted on a *tanka*, and his countenance is buried in a thicket of votive scarves called *kadakhs*. Beside him, to the left of the spectator, stands a cast statue of the reformer, Tsong Kapa, with mild, dreamy features. On the right the unfathomable scriptures are stored on firm book-shelves. The *lhakang* of Tashi-gang, here called *tsokang*, is only scantily furnished with idols, but the atmosphere is dark and mystical, such as is generally characteristic of lama worship.

When the monks murmur their prayers in the *lhakang* in a half-singing tone and at a bewildering rate, a lama sits in the *manekang* turning the great prayer-mill, which sends forth from its interior innumerable "Om mani padme hums" to plead for the mercy of the eternal powers.

The tea-kettle boils in the kitchen on the hearth of masonry, and the ecclesiastical cooks appear like mist forms through the thick clouds of steam. In the court before the kitchen-door stands a *hla-tamchen* or faggot, in which every twig is hung with coloured strips and every fragment bears the holy syllables. The bundle is housed in a cubical niche, its walls decorated with gaudy and inferior paintings.

The lama superior of Tashi-gang bears the title of *Umsed*, which properly signifies leader of the choir. He had come here three years before from the large monastery Sera near Lhasa, and he had still to complete a year's

service in far western Tibet. The rest of the brotherhood are recruited in Totling, Chumurti, and other districts in the neighbourhood. I was told that Tashi-gang formerly belonged to Ladak, but that not long previously an exchange had been effected, in consequence of which Tashi-gang is now under the authority of Sera while the Maharaja of Kashmir has acquired some kind of right of possession over Misser lying between Gartok and the Rakas-tal.

"How do your monks get their living?" I asked.

"We hire out a hundred yaks and as many sheep for transport, and, besides, the Garpuns are bound to provide us with all the parched barley (*tsamba*) we require."

"Then you live peacefully and free from care?"

"No; Tashi-gang has seen better days, and has had larger property. Then we had the means necessary for keeping up our buildings. Now we receive barley sufficient to maintain ourselves, and we have to let the monastery fall into decay. The holy Yigde is a cruel, hard-hearted god, and his service must never be neglected; he must be constantly appeased. The viceroys fear his power and visit him annually with offerings. Nor do they neglect their duty towards us, the servants of the god."

The outward decay gives Tashi-gang the appearance of a mediæval castle which is proudly enthroned on its rock, something between a strong fortress and a ruin, a memorial of a departed age. With every year that passes over the stronghold of the god Yigde, decay leaves new seams and gaps in the walls. From the broad frieze up above under the eaves blood-red streaks run down to the ground below. They are the work of the summer rains, which have so disfigured the walls that here they are brick red and there are tinged with pink. Here and there the plaster has been removed, and chips of stone have fallen; in this case it is weathering, the change from burning sunshine to cold cutting frost, which has brought the cloister walls a step farther on the way to destruction. The streamers on the roof flutter in tatters that can hardly hold

together; there it is the wind that lords it over the home of the gods.

A small number of windows and a few loopholes pierce the wall facing west. On the southern end the windows are arranged unsymmetrically, and a small balcony hangs high above the ground, a quiet peaceful resort in this otherwise dismal, gloomy cloister. Here is the *labrang*, where the abbot dwells.

The whole monastery is formed of a long, irregular collection of buildings and walls enclosing courts also of a long shape. They are separated from one another by small internal walls, and are also connected by doors usually approached by steps, for the surface of the rock is uneven. In the peripheral buildings are the cells of the monks, and the whole edifice is dominated by the *lhakang*, the hall of the gods, on a polygonal ground-plan.

The mountains to the north-east and south-west rise out of the valley in majestic imposing masses, in steps, ridges, and summits. Tinted violet and yellowish-brown, their outlines are sharply and vividly defined at all hours of the day. At sunset the monastery glows bright yellow. Then the shadows creep up the flanks until the highest pinnacles shine in purple gleams. The Indus valley, upwards in the direction of Gartok and downwards towards Ladak, presents a boundless perspective. The appalling distances make one take deeper breaths, and one experiences an oppressive feeling of being shut in between two immense folds of the earth's crust—the Himalayas and the Trans-Himalaya.

Owing to its breadth and its slow fall the river has a grand appearance. We descend from the heights behind on our way north-westwards, and therefore there is little drift-ice, only a small border here and there along the bank. At some places wild ducks are heard quacking, but the wild geese have at this season no taste for Tibet, and they will not change their abode again this year.

The bright scene in clear colours and sharp contours

became blurred in the afternoon owing to a violent storm from the west, which rushed down on the valley, stirring up great clouds of dust. The monastery looked as shadowy as a ghostly castle through the mist, the surface of the river rose in white foaming billows, and the ripples beat solemnly against the bank.

So ended our second day at Tashi-gang. A liberal present of silver rupees was distributed among the monks, silver rupees with the crowned head of the queen—they would not take the rupees with the uncrowned king's head. I had to make amends in this way for the misbehaviour of my Ladakis on the previous evening, and, moreover, I pitied the dreadful solitude of the priests in their greyish-red prison walls. Did an unlucky fate compel me to take monkish vows and spend my days in Tashi-gang, I should die of weariness and disgust at the unutterable dogmas opposed to freedom of thought of any kind. In the cavernous darkness of the temple hall the wicks of the butter lamps smoke while the sun shines outside. I should even grow tired of the view from the sunlighted balcony. The freedom of the Himalayas and the wild Sutlej valley to the south would irresistibly arouse my longing. In summer it would be all very well, when the liberated water of the Indus flows down the valley on its way to the sea. But what of winter, when the river is frozen over and silent, when snowstorms howl mournfully round the corners of the cloister buildings, and when the wind screams and whistles in the window openings as though ghosts and hobgoblins were at play?

CHAPTER VII

THE LAST DAYS ON THE INDUS

WHITE wreaths and atolls of ice covered half the river on the morning of November 15. The air was clear and calm, not a breath ruffled the water of the Indus, on which sluggish eddies formed pleasing designs as they revolved down to an unknown destination. Everything tempted me to a boat voyage, and I would let the proud stream carry me all the way to the next camping-ground. I myself took my seat in the front half of the boat, and drew every bend we passed on my map. In the stern half Robert was responsible for the oars and the management of the boat. Rabsang and Tundup Sonam accompanied us on the bank with the horses.

Where the river is broadest the ice drifts down noiselessly and slowly. In the narrower windings the floating blocks bump against the bank, and then a scraping noise is heard again. Above us rise the crests of the lofty mountains, and the land is still and peaceful. The temple fort of Tashi-gang on its hill is visible for a time, and is then concealed by the bank terraces and the inequalities of the ground.

The water is not quite clear; the depth varies generally from 23½ to 27½ inches, and the bottom can be seen only through 20 inches. The bed is regularly formed. Sometimes we float over water a foot deep, and then the bottom seems to move up, and the boat stops. The drift-ice warns us of shallow places. Where the porous ice blocks are piled up in hummocks in the middle of the

channel we steer past the shoals where the current is broadest.

The river is remarkably straight and the bends that occur are far from sharp. We sail along the cliffs of the right side of the valley from which boulders and pebbles have fallen into the bed. Here a series of beautiful scenes are displayed, and we glide along a pathway full of crystals glittering in the sunshine. A light south-easterly breeze drives us forwards. I enjoy to the full the rest, the beauty of the country, and the consciousness that I am borne along by one of the most regal rivers of the world.

The bank on our side is silent and desolate. Occasionally only are seen *mani* walls or a small ring fence of stone, within which some hunter is wont to lie in wait for antelopes. Farther down a herd of yaks is grazing, and two of the animals get wind of us and sniff with an air of surprise. Yonder at the bend a fox prowls about, his mouth watering at the sight of a flock of chattering ducks that are swimming by the opposite bank.

Terraces 10 and 14 feet high confine the river bed, and bear witness to a more abundant precipitation in earlier times. The fall is slight, and seldom do we hear the water murmur gently at a bend. At a projecting point of rock rapids are formed, and we are drawn in at a swift pace among treacherous blocks.

The day is cool, and it is a chilly pastime to sit hour after hour in a canvas boat among the drift-ice. Now we skim with great velocity along the foot of a precipitous cliff, and excitement makes us hot. Bushes grow in sheltered fissures, but otherwise the banks are bare. We often pass deserted camping places which are visited by nomads in summer. On a steep acclivity near us some wild sheep are feeding.

A row of small cairns was erected on a promontory. Between some of them strings were stretched, and a solitary Tibetan with his gun on his shoulders moved about setting his nooses. When antelopes see their path crossed by such

a contrivance they cannot make up their minds to spring over it, whereby they would escape, but they run along the row of cairns to the end, just where the hunter has laid a snare on the ground, if he is not lying in wait himself.

Wind ahead, our course is checked! Tundup Sonam must come aboard and help to row. The drift-ice is carried by the wind to the right bank, and makes more noise than before. The thermometer at one o'clock falls to freezing-point in the water. The drift-ice maintains its hold. It gains ground from day to day as the winter draws on, and at last comes a day when a translucent bridge spans the river with its vault from bank to bank.

We glide at a rapid pace over shallow water, the keel grazing the gravel at the bottom, and lo! now we are fast aground. The drift-ice sweeps past us and bumps against the fragile boat. We row with all our strength, float off at last, and drift again down the Indus.

On the right opens the portal of the Potaö-sang valley, with a brick-red mountain peeping out from its background. Through this valley runs a way three days' journey long to Rudok on the Panggong-tso.

The current becomes swifter among a succession of small rapids. The river narrows with the valley, and we shoot at a dizzy speed to the new camp where strong hands hold up the boat. Then we make ourselves once more at home on a foreign shore.

Two fine specimens of the Ammon sheep were grazing on a slope, and Tundup, the hunter, wished to try his luck again. He made a détour through furrows and dells up to the ridge to catch the animals from the rear. I saw him through the field-glass sneaking along like a panther, and seeking cover behind the inequalities of the ground. But the senses of the animals are extraordinarily sharp. Suddenly I saw both raise their heads and gaze in the direction of the hunter. The wild sheep turned as at a given signal and dashed furiously down the steep rocky declivity. It was a grand sight to watch them come down

in a cloud of dust to the level ground, and in two seconds ascend with unchecked rapidity the flank of another projection and disappear behind its top.

A raging storm from the south-west howled through the cordage and tore at the tent cloth when we woke next morning. Dust and withered grass whirled into the tents, the sky was covered with dense clouds, and the weather was raw and chilly when we rode away.

The valley contracts, its bottom becomes hillocky, and is covered with pebbles. The river keeps obstinately to the right side, but on the left, 80 feet above the valley bottom, stands a very old terrace, rounded by time and often broken through by side valleys. Beyond the side valley Tavuk, the mountains on the right side of the Indus valley become steeper than before, and here also are seen fine terraces in which a horizontal bedding of the detritus is plainly perceptible.

Beyond the hill Tsenmo, with its now empty summer camp, lies a row of *mani* walls, now more and more resembling in form those found in Ladak—long walls of boulder stones covered with flat slabs.

Rolled stones play an important part in the country which we have now reached. The whole of Demchok, the last village on the Tibetan side, is built of them. It consists, however, of only four or five huts with brushwood roofs. Walls of boulder stones also surround the miserable fields of barley, the sheep-folds, and the level floors of hard stamped earth where the grain will presently be threshed. A tattered old man and a famished youth were the only inhabitants that showed themselves. Our mules strayed about the stones nibbling at the refuse and sheep's dung, and the scanty grass growing between the springs and ice-flakes on the river strand was little better.

Our Tibetan guides looked upon Demchok as the frontier of the states of the Maharaja, for the power of the Devashung and the Dalai Lama, they said, extends no farther. Really, however, the frontier is a short day's

journey farther down. My Ladakis were delighted, but I was grieved at leaving Tibet behind me with so many problems unsolved. But I was determined that I would be in the unknown land again a few months later.

On November 17 we bid farewell to the last village in Tibet, and ride down the detritus fan of Demchok to the bank of the Indus. Fishes lie in close shoals under the belt of ice attached to the margin, and when they are frightened away by stones they return at once, probably because the water is warmer under the cover of the ice-flakes. The valley assumes a peculiar form; while the road continues straight along the left side, the river makes a curve to the north and north-east to pass round an isolated ridge through a wild bed it has excavated along its foot.

The ground falls sensibly. Barrenness and desolation everywhere! Now comes a herd of yaks on the march from Ladak. It was good to see at last some life on this road, which, indeed, shows signs of no little traffic between the two countries, but on which we had hitherto been alone.

A cairn marks the highest point of a small swell in the ground, and the usual streamers hang on strings stretched between sticks. Our Tibetans march round the cairn to show reverence to the spirits of the earth. In the distance a huge light-blue and white mountain mass appears, not far from the village Chushul, which is five days' journey off. Numbed by the stormy wind which has blown right in our faces during the last hours, we are glad to see at last our tents pitched at the spring Na-gangkal (camp 261), and to hurry under their sheltering roofs. The place was bare enough. There was water in abundance but no pasture at all, and not a scrap of fuel. We therefore sacrificed two boxes which were worn out.

Two dogs deserve honourable mention. We had nine four-legged sentinels, a guard of Asiatic tramps, pariahs, which had come and offered their services without waiting for an invitation. In the case of most of them we could not find out where their homes were and where the tents

stood which they had deserted to follow us. The Brown Puppy was the only one which had shared in all our adventures. She was a veteran from Srinagar, but her days in our service were numbered, for she was lost in a storm the next winter. She had her corner and felt rug in my tent where she slept at night. She used to tease in perfect friendship a yellow dog from Gartok, and he was her unfortunate companion in the storm.

Among our old friends was also the aged limping camp watcher from the country north of the Ngangtse-tso, who had been with us about a year. His coat hung down to the ground and he looked like an old yak, and he could not run like the others but crawled along step by step. He started in the morning with the laden yaks, but was soon tired and lay down beside the road to wait for me. Then he kept me company as long as his strength allowed, and laid himself down until Tsering came up in the rear with my tent and kitchen utensils. Finally he dropped behind Tsering also, and turned up a solitary wanderer at a late hour in the camp, breathless and panting. In spite of his unattractive appearance and his infirmities, or perhaps because of them, he enjoyed greater popularity than any other member of our foreign legion. Puppy played with him, jumping over him as with drooping head and shuffling steps he struggled to get over the long journey. When all our dogs barked together at night it was not easy to get any rest.

We set out on another day's march. The cold in the night has sunk only to 10.2°, but the river is frozen over here and there in quiet places. Beyond a yellow quartzite promontory the Indus returns to the part of the valley we travel along, and the beauty of the landscape is enhanced by the crystal-clear bluish reaches of water vainly contending against the cold of winter. At Puktse, where a bush grows here and there amongst the withered grass, a small ice bridge spans the river and cracks when my men test its carrying power.

Rich in colour and enchanting in spite of its terrible desolation, the landscape lies under the bluest of skies in which not a cloudlet or rising mist is to be seen. Therefore distance and perspective are unaffected by disturbing influences in the atmosphere. A countless number of spurs of the mighty ranges that enclose the valley appear in succession in front of us to the north-west. Between them flows the famous river by whose bank we tramp along the endless road to Ladak.

At Puktse our Tibetan escort had fulfilled its task and was to return to Gar-gunsa. They had accompanied us to prevent digressions along forbidden roads. Nevertheless, I was pleased to reward them liberally, for their conduct had been beyond all praise, and they had obeyed the orders given them and performed their duty.

The Gova and the whole population of the neighbouring village of Kuyul came to wait on us. They were all polite and agreeable but poor and wretched, since a robber band from the Tibetan side of the frontier had shortly before thoroughly pillaged their small community, the extreme outpost of the states of the Maharaja. The people had, indeed, addressed complaints to the authorities of Ladak, and these had promised to do their best, but the best that a district judge in Leh does is—nothing at all. The good folks of Kuyul are subjects of the famous monastery of Hemis. In outward appearance they resemble the last Tibetans except in clothing. Their skin coats hang down and are not drawn up and puffed out above the girdle as in Tibet. Their headgear is the characteristic Ladaki cap of sheep-skin, which can be turned down to protect the ears and the nape of the neck.

The men of Kuyul stayed over night in our camp, finding free quarters under the open sky. These sons of the wilderness are, indeed, accustomed to cold, but they must feel it through their ragged skin coats when the thermometer falls to 5 degrees below zero. They looked like ruffled horned owls when we left them to their fate

in the morning, accompanied by the Gova and two of his men.

The Indus, which hitherto has stuck faithfully to the foot of the Trans-Himalaya, now flows down the middle of the valley and winds more frequently between its bushy banks. The ground is covered with the coarse sand produced by weathering, which remains after the wind has finished its sorting work and has carried away the finer drift-sand. We often ride over barren stretches as level as the finest parquetry flooring. Such is the ground where silt in microscopic particles has been deposited by rain-water in shallow hollows.

An excellently built stone wall with slabs bearing large letters in red and white is named Mani-tumtum. Not far from it the caravan crosses the river at a point where the flakes of drift-ice have been thrust over one another and frozen together into a firm mass.

Accordingly the camp (263) Dungkang is on the right bank. Here the river was 259 feet broad; its mean depth was 18.1 inches, while its maximum was 31, and its velocity 14.2 inches. The Indus here carried about 460 cubic feet of water, and had therefore lost quite 120 feet since we last measured its volume. At this season the cold increases day by day, the springs cease to flow, and the tributaries freeze up. Farther west, however, in Ladak, the river increases gradually, and at Nurla its volume in January is greater than at Dungkang in November.

Another day's journey on November 20 without any noticeable change. The eye falls on the same mountain masses to the south-east which we remember at Demchok; to the north-west the snowy group we have seen so long grows larger. Left and right tower the huge chains we have been familiar with since our halt at Gartok, and in the middle of the valley meanders the river which has supplied us with water for the past two months. Now a sheet of ice covers most of the Indus. But snow is still absent even from the flat hilly crests of the Trans-Himalaya,

and on the Ladak range small remnants of snow remain throughout the year only in shady ravines. Grass now grows everywhere, and here and there bushes also stand fairly close. But no tents, no huts, neither herdsmen nor herds! Where the river crosses over to the left side of the valley we pitch our camp on its bank for the last time.

At this camp, which is numbered 264, the Indus is almost free except where small strips of ice skirt the brink. The dark blue water glides along lazily in noiseless eddies and spiral dimples, and forces its way south-westwards in a transverse valley through the Ladak chain. To the north-west we catch sight of the Tsake-la pass on the watershed between the Indus and the Panggong-tso. It is not a pass on a crest but a flat neck between two mountain ranges, the Trans-Himalaya and the Ladak chain.

The old west wind with cutting frost and icy cold howled over the banks of the Indus, and would have swept our tents into the river if we had not secured them extra firmly with ropes. The constant west winds of the Chang-tang had again commenced their lively dance over the highest elevated region of the world. I recognized their mode of attack, and understood that the storm challenged me to share his dominion with him. And I smiled over the camp-fire at the thought that I had already accepted the invitation, and that the new caravan which was to lead me up there would listen in a few days to the first reveille. "Choose between the winter of Tibet and the perpetual summer of India," whispered the wind in the grass by the Indus bank. I had already made my choice without hesitation, and yet I experienced a certain feeling of self-pity as I thought of the terrible cold that awaited us.

In violent gusts the wind rushes over us and rolls in wild cascades down from the heights. We close our tents and creep into our lairs, while a roaring tumult rages outside all night long.

CHAPTER VIII

IN LADAK FOR THE LAST TIME

AFTER nearly 18° of frost in the night the west wind waked us with its roar on November 21, and our path led us into higher regions again from the bank of the Indus, where we lay in camp 264, at a height of 13,711 feet above the level of the sea. The grass of the steppe, now turned yellow, stands thickly on the clayey soil in which drift-sand is also abundantly mixed, which at times forms dunes with ridges turning along the mountain flanks northwards. Many dunes, however, are compelled by the grass roots to give up their wanderings.

The valley by which the Indus breaks through the mountains remains behind us to the left, and the path winds up to the pass Tsake-la. Grey and purple débris of granite, porphyry, and quartzite covers the ascent, which is not very steep. Here nothing grows. There is only a small oasis, Tama-yaghgang, where grass and bushes surround a spring.

The northern mountains are built up of green and violet porphyrite, but higher up grey granite prevails. To the south smoke rises from the stone huts of the village Salma, in the midst of barley-fields. We approach the Tsake-la, but ere we have reached it we halt for the night at the springs of Dunglung, which form flat ice-flakes among the thriving grass. The height is 14,597 feet, and therefore we have mounted 886 feet from our last camp on the Indus. From here we can perceive in the distance the mountains round Demchok. The Indus valley stretches

in endless perspective to the south-east, its bottom tinted yellow with the colour of the steppe, but the river itself we cannot see for the distance is too great.

Next morning we are up in good time at the pass Tsake-la and its cairns adorned with horns and streamers. Here the height is 14,840 feet, and the wind is cutting at a temperature of 23°. We hurry down on foot to bring our blood into circulation again. Valleys, rocky promontories, and *mani* walls succeed one another, and the scanty vegetation struggling for existence forms yellow patches round the springs. The lofty snow-covered mountain we have seen so long is now near to us, but its firn-fields are hidden by intervening heights. The Panggong-tso is not visible, though the crests rising from its northern shore are in sight.

We descried from the pass the projecting mountain behind which our camping-ground for the day lay at the village Chushul. But hours passed and the day declined before we reached it. The path follows the left side of the valley. A succession of projecting heights appeared in front of us. The sun sank and the shadows grew longer. Again we rode past a jutting rock. Was not this the last? No, still appeared ever fresh promontories on the road, and the wind was so icily cold that we had to walk to keep warm. Twilight deepened, the road became less distinct, the wind rose still more. Should we reach our destination by this road? Four long *mani* walls and a small *chhorten* indicated the proximity of a monastery, but we could scarcely see them for it was dark.

At length the last mountain spur was passed, and the fires of the camp at Chushul flashed before us. The brook of the little village was half frozen over. The horses slipped and slithered over rounded ice-humps, plumped into the water, balanced themselves on the uneven bottom, and at last with a jump reached the grassy slope of the farther bank. We were tired and frozen as we turned our steps to the fire and lighted our pipes.

We had deserved a day's rest, and the headman of Chushul did all he could to pay honour to his far-travelled guests. The entertainment, which a European can hardly escape when he is a guest in a Ladak village, began before noon. In July 1906 dancing and music festivals had been held in my honour in every village on the way to Leh, and now on my return the rural performances began again. The twelve beauties of Chushul danced in slow rhythmical time in front of our tents. They were dressed in green and red sheep-skins, finery of all kinds bedecked their tresses, and ribbons adorned with turquoises fell from their crowns down their backs. Their eyes were turned to the ground and their expression showed no passion, no joyousness; sometimes they raised their right hands, sometimes their left, and they turned themselves round as they slowly advanced in Indian file. They were certainly not lovely, these ladies of the mountains, but they made up for it by dirtiness, shyness, and modesty. There was no hurry with the ballet in Chushul. They danced for hours, and the dance presented no surprising or alternating modifications. An old man accompanied it on a string instrument; and as the only drum in the village was cracked, our kitchen staff brought their most sonorous saucepans to enhance the brilliance of the festival.

The sights of Chushul are soon enumerated. The village consists of some twenty huts and two temples, the one at the foot of the hill, old and in ruins, while the other, Lundup-Chüding-gompa, has been built on a rise at the expense of a wealthy man, whose son, the lama Kunchuk Tingsin, now provides for the upkeep of the monastery. I was told that thirty monks served in the temple, but that they now lived scattered about, each in his own home, and that only the superior was then in the cloister.

In the other temple courtyard a streamer pole and a *chhorten* stand between dilapidated huts containing monks' cells. The façade is whitewashed, and the antechamber,

with the indispensable spirit kings, is closed by a red-painted wooden grille. The temple hall is well provided with images, some life size, others rather smaller. The sunlight penetrates in above their heads more freely than elsewhere through a quadrangular opening. A passage runs round the group of gods, along which the pious make their rounds. In the middle of the group sits Guru Rinpoche, with a grey mask in his hand, and round him stand in inextricable confusion Tsepakmet, Chenrezi, Tsong Kapa, in red mantle and pointed yellow cap, and several statues of lamas with dreamy meditative countenances.

The superior told me that a short time before thieves had broken into the cells of the lamas and carried off articles to the value of 200 rupees. The robbed priests knew how to take care of themselves. To make up for their loss they extracted some precious stones from the statues of the gods and sold them to dealers in the neighbourhood. This theft, however, was detected, and a thorough investigation had been commenced into the conduct of these pious desecrators of the temple.

At evening the ballet was repeated. But this time my men were the hosts at their own fires. There was dancing, singing, and cither-playing, tea-kettles boiled, and the *chang* jugs filled with the light beer of the country made their rounds. The brave men were lively and excited; they were home again in Ladak, to them the finest country in the world, the country where their mothers had carried them in their arms, where their fathers had hunted the ibex and wild sheep among the rocks. Home-sickness was over and all the trials they had endured were forgotten. But the songs were the same that they had sung in Chang-tang, when the storm howled round the tents and the flames of the camp-fires fluttered and flickered like bunches of streamers on temple roofs.

The next day, on November 24, we rode away from the houses of Chushul and the frozen canals, which during the warmer seasons irrigate the barley-fields of the village.

On this road also stand numerous *mani* walls looking like petrified railway trains. The road runs uphill north-westwards, and on the right rises the mighty snowy mountain. Down below at its foot trips along a sheep caravan, 500 animals laden with barley on their way to Rudok. Some of them are painted red and look like bleeding sacrificial lambs. In front marches a wether with his eyes constantly fixed on the path, while the whole herd follows him listlessly, half asleep, but dexterously balancing their loads. The shepherds that bring up the rear can quite depend on the toiling animals keeping on the path to Rudok.

We ourselves work our way laboriously up to the pass Kongta-la, a pebble-covered saddle 16,605 feet above sea-level. My men burst out with a loud yell of delight before its conical cairn and its votive pile of horns, stakes, streamers, and rags.

The valley Ar finds its way hither from the south-west through a cutting in dark porphyrite rocks, here filled with boulders and there leaving room for a path beside the brook which is frozen to the bottom. In the mountains on the north-east side of the pass grey granite predominates. The fall from the Kongta-la north-westwards is imperceptible. We pass six tents and two flocks of grazing sheep before we pitch our camp at the rocky promontory of the Lung-kongma valley.

The day was dull, grey, and cold, but at sunset the sky cleared in the west and the mighty masses of the granite mountain glittered like the reddest gold.

Another day breaks over the earth, the tents are folded up, the horses are saddled, and we continue our long wanderings. The valley falls more steeply and its bottom is full of granite blocks troublesome to pass, among which a brooklet murmurs under its crystal roof of ice. It grows gradually, receiving tribute from all the springs in the valley, until at length it unites with the Shyok, the great affluent of the Indus. At one place where we cross the

brook the ice mantle is thin and transparent as glass, but nevertheless bears the horses as they are led carefully one by one over a sand-strewn path.

The day comes to an end, and the valley is again shrouded in shadows while the sunbeams are still gilding the lofty summits around us. A huge sheep caravan is encamped, and its owners have piled up the sacks of barley into walls; in their shelter the evening fires blazed cheerfully and pleasantly. A second caravan has not taken the trouble to remove the loads from the sheep, and the animals have to pass the night with the sacks on their backs. We, too, camp near them, in a place called Sara. Here the warrior chief Soravar Sing defeated the Tibetans, as he some seventy years ago took Ladak from the Maharaja of Kashmir.

We noticed daily that we were approaching civilization. At every camp we met horsemen with news of my new caravan which was to assemble at Drugub. They brought also welcome additions to our provisions—fowls, eggs, and apples, and one of them handed me a kind letter from my old friend, Colonel Sir Francis Younghusband, who was then Resident in Kashmir.

November 26 was the last day I was in the company of my old servants. We follow the brook in the usual order of march. The path, however, climbs gradually up a small rise and remains at a considerable height above the valley floor. The landscape is wild and imposing. At our feet the brook creeps under its ice mantle. The narrow path covered with blocks and rubbish runs along the precipitous edge like the eaves of a roof. During a short halt we roll some loose boulders over the edge of the road. They thunder in mighty leaps, twisting as they fall down the steep walls, and with a tremendous noise smash to pieces the ice of the brook.

Now there is a rapid descent. We recognize more and more clearly the wild-fissured vertical sculpture that characterizes all the side valleys of the Indus. A cluster

of huts surrounded by their fields, thin poplars, and the usual symbols of Lamaism in stone, bears the famous name of Herat. Chilam is a village a little farther down, where our yaks can only be induced by coaxing and threats to trust themselves on a swinging bridge of stone slabs supported by two tree trunks.

The valley becomes wilder and more enchanting the farther we descend. The uniform monotony of the plateau country is no more, but we find ourselves in a country where the rivers succeed in breaking their way through the stupendous mountain masses which stand in their way. More frequently we perceive traces of the struggle of man with uncontrolled Nature. The path is more clearly trodden out as it twists in thousands of bends among the troublesome boulders, the fields increase in number and extent, and the ever-present *mani* walls cry to heaven from the depths of the valley. Here and there landslips have occurred on the precipitous walls, and on our left open three side valleys together, all contributing their shares to the water of the main stream. The erosion terraces are well developed, their lowest steps lying about 60 feet above the brook. We can hear and see how these rivulets work continually to cut their channels into the solid crust of the earth and deepen the valleys.

We have reached an important point. The Ladak chain, which we have so long had on our right, drops behind us, and the brook turns sharply to the north-east to break through a transverse valley in the chain which separates us from the country of the Panggong-tso. This breached valley is picturesquely hemmed in between high steep granite rocks, and its fall is so rapid that ice has not been able to form on the foaming rapids. Only occasionally is there room for a hut and patch of cultivated land.

In such a spot Tundup Sonam had his home. He hurried forward to greet his old mother and his brothers, and the whole family beamed with joy at the return of the bold hunter. They all stood by the road as I rode past,

and were rewarded with Indian silver money for their gift of welcome, which consisted of dried apricots and bowls of milk.

A party of horsemen appears among the huge granite boulders. There they come, my old friends Anmar Ju and Hiraman, to witness my fourth entry into Ladak and offer their services.

The valley becomes still narrower. It is as narrow as a cutting. The path winds up and down over the detritus cones. Two *chhortens* are erected on the top of a block of rock. At a very narrow spot two huge boulders have fallen and made a bridge across the stream, and below them a deep basin of dark blue water has been formed.

Now we are near the end. There lies Tankse in its cauldron, and there stand the poplars under which Muhamed Isa in August 1906 sewed together the black tent and mended the mules' pack-saddles. The whole village turns out to meet us. Everything is the same only that all is cold, frozen, and leafless, and the grand caravan leader sleeps in his grave at Saka-dzong.

Here the circuit which we had for fifteen months described through the interior of Tibet was closed, here all ties were loosed, my old servants were dismissed to their huts, and a new and serious chapter was commenced.

A few days later I was in the neighbouring village of Drugub among new men. With them I began the hardest journey I have ever accomplished in Asia. On December 4 we started for the Karakorum Mountains, crossed in mid-winter with a temperature of −40° the loftiest heights of Chang-tang, and on April 24, 1908, were held up by Dorche Tsuen, the Governor of Saka-dzong, and his men. After much palaver I obtained permission to go my own way, which of course took me up and down over the blank space where the central chains of the Trans-Himalaya raise their heads. Tibetan soldiers escorted me to the Tarok-tso, where I had arranged a rendezvous with the caravan leader Abdul Kerim and six of my men from

Ladak. Five Ladakis accompanied me, namely, Gulam, Lobsang, Kutus, Tubges, and Kunchuk. This arrangement, unpractical in itself, was forced upon me by the Tibetans that they might keep a tighter hold of me.

I travelled westwards past the Teri-nam-tso, over the Lunkar-la pass, 18,274 feet high, and came at last at the Nganglaring-tso into country of which the pundits had collected a few extremely meagre and indefinite reports. The Selipuk monastery is the chief place in this part of Tibet.

There I had to leave the reader in the second volume of this book. The space at my disposal was filled up and I could not describe my journey through the Sutlej valley to Simla. And yet this route deserves description, for it is one of the most beautiful, wildest, and grandest in the world. The mighty river has excavated its valley right through the chains of the Himalayas. Certainly the well-known road from Rawal-pindi to Leh, which traverses the same ranges, abounds in enchanting scenes, but it has been constructed and improved by human hands, and solid bridges cross the rivers. The route through the Sutlej valley, on the contrary, has been for the most part left untouched, and its beauty increases with every day's journey from the holy lake.

The following chapters are devoted to the road between Selipuk and Simla (see Vol. II. p. 404).

CHAPTER IX

THE SELIPUK MONASTERY

HALF a year has passed over dreary Tibet since we started from Ladak. Now our camp is pitched on the bank of the river Sumdang-tsangpo, a river which derives its origin from sources in the Trans-Himalaya, and mingles its fresh water with the briny waves of Nganglaring-tso. During the latter days we have ridden along among the rocks on the southern shore of this lake, which the pundits had heard mentioned. But the blue sheet of water, the pink irregular shores, and the rocky islands which rise out of the salt lake, had never been beheld by a white man.

It is midsummer. I write June 26, 1908, in my diary. A year of adventures lies behind me, and only the retreat remains to be accomplished. I have with me four Ladakis and a Tibetan, the excellent Lobsang, besides two guides and owners of yaks, who have accompanied me through Rundor-changma to Selipuk. Abdul Kerim and his companions have not yet joined us, and we have quite made up our minds that we shall never see them again.

In the course of the day a violent wind has swept over the country, and a little rain has fallen. The season of the south-west monsoon has not yet reached this lofty remote region, and the Sumdang-tsangpo carries only 88 cubic feet of water, but in consequence of its breadth and depth has the appearance of a fairly large river. At the left bank the water flows clear and pure, but on the right it is turbid and white as though milk had been poured into it. Probably wild geese or gulls have stirred up the bottom

somewhere above the camp. At sunset the gulls sit in hundreds meditating on a mudbank, and shine in the distance like chains of white pearls.

The interior of Tibet is a dry, barren, mountainous wilderness, far away from all the seas of the world, and higher above the ocean than any other country. The traveller longs for water, and likes to camp on the shores of bluish lakes or murmuring streams. Such a camp we occupied now. The sea-blue surface of the great lake stretched away northwards, and the river flowed a pace from my tent. The Sutlej, however, does not murmur, and could tell no experiences from its home in the Trans-Himalaya to the sharply defined grass-grown banks which scarcely rose above its surface.

A felt rug is stretched between two stakes firmly rammed into the ground in front of my tent-opening, so that I can sit cross-legged out of doors, as in a shady verandah, and let the pencil or pen glide over the paper. When it is too dark to work, and too early to light a candle, I still sit there, smoking my pipe, and watching the heralds of night chasing the fleeing day over the western mountains. I am longing to go home. For two long years I have not seen a European. Solitude is pleasant, but one gets tired of it at last, and longs to see men of one's own race. When the last bright gleam pales, and dusk is all around, it is still three hours before night comes and puts an end to my yearning.

I look back with singular melancholy on those endlessly long evenings, when the ticking of my watch was the only sign that time was passing. If I had only had books to read! But our baggage animals had broken down, and my collection of books had long before been scattered to the winds, one volume after another. Only a Bible, a Swedish hymn-book, and Fröding's poems were left. The Old Testament helped me through many lonely hours. At last our situation was so critical that Fröding too was added to the ballast we discarded. The leaves which I knew by

heart were torn out, but I could not retain in my memory the contents of some of them.

Lobsang and Kutus, my teachers in the Tibetan language, gave me their company every evening, and after they had withdrawn I wrote down the words I had learned in a vocabulary. Then Little Puppy came into the tent to play a while with me—the black pup born in the Shyok valley, which had had the giants of the Karakorum for sponsors, and received its name at the font when there were fifty degrees of frost. Gulam brought in a very simple supper of mutton—always mutton. I had a thorough dislike to this dish, and contented myself with bread. At nine o'clock I read off the meteorological instruments, and a little later Gulam tucked me up in my furs and closed up the tent. Then came blessed night with rest and forgetfulness.

This particular night was cold for the season—25°. So it is in the height of summer at Nganglaring-tso at a height of 15,570 feet. In the daytime the temperature may rise in the shade to 59°. Then, with a calm air and a clear sky, it is burning hot. But scarcely has the sun sunk when the cold breath of night steals over the brow of the earth.

Early in the morning a pack of wolves made a fearful commotion round the camp. They accused us of murder, and wished to recover a cub which Lobsang had caught and given for supper to our big watch-dog Takkar. Four fully grown and as many young wolves prowled about the farther bank where two mounted Tibetans tried to kill the young ones. We had seen wolves in the country before. They are very common here, and owing to their voracity are a scourge to the flocks. Every one who kills a wolf receives from the nomads who have suffered from the beast a *shanglung* or wolf-fee. In one camp he receives a bowl of *tsamba*, in another a silver coin, perhaps even a goat or sheep. At any rate he reaps a good harvest.

I sit on horseback, my men go on foot, driving our remaining baggage animals over the steppe, scantily

covered with grass, which separates us from the monastery Selipuk. We see it before us in the distance. One is almost tempted to take it for a curious vessel with masts, rigging, ropes, and pennants, or even for a Viking ship adorned with flags for a festival.

A whole village of black tents has sprung up on the plain. The white tents indicate the presence of some chief. We soon learn that the owner of the whole village is the chief of the district Chokchu, which lies to the west of the Dangra-yum-tso. At the Shovo-tso we had seen his caravan on the march westward, and we knew that he and his family and retainers were on a pilgrimage to Kang-rinpoche. The Sumdang-tsangpo flowed between his camp and the cloister hill, and we camped on the left bank at the foot of the cloister hill.

Our situation was extremely uncomfortable. We came, six ragged fellows, from no one knew where. I was dressed as a Tibetan, though I had no longer the slightest cause to preserve my incognito. I wore the Tibetan costume for the simple reason that I had no other. How would the monastery, or rather its monks, who had in all probability never seen a European, treat us? All had heard of Younghusband's expedition to Lhasa, and knew that the white intruders had shot down the Tibetans like partridges. And now one of the white demons had come hither. What would the chief of Chokchu say, who was here in his camp surrounded by a retinue armed to the teeth? We might have avoided Selipuk if we had been frightened, but we were not. We pitched our camp on the bank of the Sumdang-tsangpo just between the chief of Chokchu and the prior of the monastery.

We had scarcely made our tent ready when the Gova of the village appeared attended by ten men. They took their seats uninvited under my felt roof, and made a great noise in their desperate endeavours to find out what country I came from, India, Turkestan, or Ladak. A white man in Tibetan dress? They could make nothing of me.

"Question me, you fellows, and you shall get information," I called out to them.

"What country are you from?" was asked on all sides at once.

"Peling" (European).

"Where do you come from?"

"From India and Ladak, but I have been at Shigatse; from the Dangra-yum-tso, but I have roamed round the holy lake; from the east, but I have been in the west; from the north, but I have travelled all through southern Tibet. My main caravan has gone astray. Get it me back."

They hardly attempted to understand such a complicated answer. However, they understood so much, that we had now come from the east, and had two young guides who at the same time were the owners of our yaks. These were to return to the Shovo-tso, and then we should have no means of transport.

"We are on the way to Tokchen," I told them. "The Tibetan chiefs have provided us with baggage yaks and guides from Saka-dzong. Now it is your turn to perform your duty towards foreign visitors."

"We know of no such duty," answered the Gova. "Selipuk is not one of the places which supply yaks to travellers. Those who are marching to Rudok or the gold-diggings in Tok-jalung change their yaks in Yumba-matsen."

"Yumba-matsen does not lie on the way to Tokchen. We must hire fresh animals here in Selipuk."

"We will gladly oblige you if we receive orders from Lhasa. But you have not even a passport; and we do not know whether you have any right to wander about our country."

"I can assure you that we have no right whatever. But here we are and wish to go away. Give us yaks and you will get rid of us."

"Let your guides from the Shovo-tso take you wherever you wish to travel."

We talked and talked but came to no agreement. Our

fellows from the Shovo-tso would not accompany us farther; their Gova had ordered them to bring us only to Selipuk. I had already been in the Yumba-matsen country. Now I must cross the Trans-Himalaya for the eighth time. Straight to Tokchen and then along the Sutlej to India. I would not consider any other programme. We could stay a couple of days at Selipuk, and, meanwhile, something might turn up to our advantage. Abdul Kerim, the scoundrel, who had our money-chest, might appear again. No one had heard of him and his caravan. I could not account for their disappearance. When we had paid for the hire of the yaks we should have only 10 rupees in hand. Then necessity would oblige us to barter a horse for two sheep, a baggage yak for a sack of *tsamba*. I still possessed two gold watches intended as presents for chiefs who rendered us conspicuous services. Who lived here in Tibet in such circumstances that he could buy a gold watch? I had paid ten pounds each for them. Now we might have to sell them for bread and butter. Never had I been in such straits in Tibet, poor as a pilgrim.

But wait! here is a rich man, the Governor of Chokchu. The gods of Tibet seem to have thrown a means of escape in my way. I must try what I can do with him. Lobsang and Kutus went off as an embassy extraordinary to his tent, chiefly to see what he looked like at close quarters, but also to inquire politely if he had any eatables to sell. The chief made a deep impression on my men. He was rich and a man of importance, that was evident. He would not trade in eatables, he told them, but we might have a loaf of sugar, and he would come next day to visit us and see how we lived.

At the same time Kunchuk spied about in the monastery where he looked up the Kanpo Lama, who is the prior of Selipuk and, besides, the *Pun* or administrator of the surrounding country. This man had spoken with great caution, but he might perhaps sell us some *tsamba* if we paid him well.

The day drew to a close and our situation was not improved. Tibetans passed to and fro among the tents of the chief of Chokchu, and his yaks, sheep, and horses fed in herds on the steppe. Compared to myself he was a Crœsus. I could not give anything to the beggars who sat before my tent.

In every camp and on every pass I used to draw a panorama embracing the whole horizon. And so I did here, in Selipuk, on the morning of June 28. Immediately the sketch was finished a Tibetan who knew the country was asked to provide material for the text. "There," he said, pointing N. 30° W., "runs the road over the Sigge-la to Yumba-matsen, which is two days' journey from here. The mountains you see to the south-west are the Lavar-gangri group (a part of the Trans-Himalaya); among those mountains are the sources of the Lavar-tsangpo, which flows into the western part of the Nganglaring-tso. And the Sumdang-tsangpo rises close to the Sumdang-la, which lies southwards from here." And he showed me also the passes Oyar-la and Gebye-la, which are both on the Trans-Himalaya.

While we were engaged in orientation I could see that the chief of Chokchu was preparing for his promised visit. Handsome white mules and small plump horses were led to his tent and there saddled. The distance was only 200 yards, but the river was between us, and also he wished to impress us with his pomp and state and a numerous following. The wild troop presented a fine sight as it rode at a smart trot to the bank and plunged and splashed through the river. The chief and his brothers had panther-skins for saddle-cloths, and the wooden frames of their saddles were decorated with bright yellow metal studs and plates. They themselves wore cerise mantles with long turned-up sleeves, low leathern boots of Mongolian style, girdles round the waist, and at the left side valuable châtelaines with dagger and fire-steel on gold and silver chains. The sabre was stuck across through the girdle, and its silver-

mounted scabbard was richly decorated with turquoises and imitation coral.

My tent, which had suffered severely from many a storm, was far too poor a reception-room for such illustrious guests. The sun, wind, and rain in succession looked in through innumerable rents, and the Pun of Chokchu and his two younger brothers smiled at one another as they took their seats on a ragged felt rug which had been spread out for them. I sat myself on my bed which also was laid on the ground. The furniture was of the same style as all the other things. Our boxes and our European things had been smashed, and my belongings lay there stowed in sacks. The eyes of the guests examined this curious interior; they had never seen the tent of a sahib so simply furnished. They also gazed at my costume but would not at first ask about it. Dishevelled Tibetan heads and sunburnt weather-beaten roguish faces crowded the tent door.

Sonam Ngurbu, the chief of Chokchu, was a man of forty, short, but strongly built, energetic and yet simple, bold and inquisitive, and yet reserved and polite. He is one of the personalities in the land of snow which I cannot forget. I see him still before me as he sat cross-legged in my tent, bareheaded, and with a regular lion's mane of black, thick, and no doubt very populous hair.

Sonam Ngurbu did not talk much. His questions were short and clear, and after receiving an answer he sat silent as though he were trying to grasp its meaning. After a short time came the usual question, "Have you anything to sell?" Yes, certainly we had, and the Huskvarna gun was brought out. We could well do without it as only two cartridges were left. Unfortunately Sonam Ngurbu had no use for a gun without ammunition. It might be worth 10 rupees, he thought. Many thanks, but it cost 300. So the gun was put aside.

Now we tried to catch him with the gold watch. The chief thought it bright and pretty, and could not conceive how men could make such small fine things. The whole

escort now took it in turns to hold the watch to their ears and listen to its tick. But at last Sonam Ngurbu declared roundly that it seemed to him unnecessary and superfluous to keep a little machine of the kind to measure time. It was all the same to him whether it was eleven or twelve o'clock. He divided his day according to the sun and the weather, his occupations and journeys by the pasturage and the seasons. And, moreover, how could he know that the thin yellow metal was really gold?

The only thing that pleased Sonam Ngurbu was my Swedish revolver. "Will you sell it me for 60 rupees?" he asked. But my pride was aroused.

"What do you take me for? Do you think that I am a pedlar trapesing about to sell revolvers? In your country where one is never safe from attacks I want a revolver myself. And 60 rupees more or less are of no consequence to me."

Thus our honour was saved for the time, though we were aware that we could not live long on honour, water, and air.

The chief took farewell of the revolver and soon after of its owner, rose, swung himself on to his panther-skin and splashed again through the river accompanied by all his motley crew.

The custom of the country and my own interests demanded a return visit. Lobsang and Kutus were to accompany me and interpret for me when my own stock of words did not suffice. I wound my red turban round my black cap, had the worst of the dust brushed out of my red mantle, thrust a short sabre into my girdle, and mounted my worn-out steed. To give my satellites a civilized appearance was a hopeless undertaking; they were and remained landloupers. I, however, endeavoured in the days of poverty and humiliation to retain a reflexion of vanished greatness by outward composure and dignity.

Sonam Ngurbu came to meet me at the entrance of his splendid tent, ornamented with festoons of blue ribands.

The ground within was covered with carpets—what luxury! and square cushions were laid round a low table. Here we took our seats, and an interminable palaver began.

"Where does your tent stand, Sonam Ngurbu, when you are at home in Chokchu?"

"In the country Kasang-tota, two days' journey to the east of the Teri-nam-tso and one west of the Dangra-yum-tso."

"How far is it from Kasang-tota to Selipuk?"

"I have been fifty days on the way," he said.

From his description it appeared that he had travelled along the north side of the Trans-Himalaya, and had to cross only one pass of importance, the Ka-la, which lies not far east of Nganglaring-tso.

"Whither are you now travelling, Sonam Ngurbu?"

"To Tokchen, Parka, and Tarchen."

"How many days do you reckon it to Tokchen?"

"Twenty."

"Then you must travel extremely slowly?"

"Yes. We are not in a hurry. We remain several days where the pasture is good for the sake of the animals."

"How large is your retinue?"

"More than a hundred men, including an armed escort. I have sixty horses, four hundred yaks of burden, and as many sheep, of which many, however, are slaughtered during the journey."

Our host told me further that he was a powerful and respected man, not only in his own home between the lakes, but also in the interior of Tibet, especially in the province of Bongba. His reputation there was founded chiefly on his ability to track out robbers and bandits with the help of his horsemen. The Devashung, the government in Lhasa, was on that account particularly well disposed towards him, and applied to him when there was any trouble with bandits. He had more armed horsemen under his command even than the Governor of Saka-dzong. Whenever people had been attacked and robbed, he let loose

his men like bloodhounds, and they seldom missed their mark.

On his journey to Selipuk also he had occasion to exercise his office of chief constable of police. Cattle thieves had played their pranks between the monastery Chiu-gompa and Tirtapuri, and retreated with six hundred stolen sheep to the mountainous regions of Bongba. He, Sonam Ngurbu, had been informed, and had organized a drive to catch the villains. As usual, he had succeeded in laying his hands on the scoundrels, and he had now arranged a meeting with one of the Garpuns of Gartok in a district called Tashi-tse-buk, and lying west of Selipuk. There the two potentates would discuss the robber question. As Sonam Ngurbu was always at feud with freebooters and knaves, he probably thought it safest to take all his possessions with him when he was going on a journey.

"What is really the motive of your present journey?" I asked.

"I am on a pilgrimage to Kang-rinpoche; there I shall make three circuits of the holy mountain and one of the holy lake. I make a pilgrimage thither every third year."

"What do you gain by it?"

"Good fortune and prosperity for myself, my family, and my flocks."

"And if you omitted the pilgrimage?"

"Then robbers would pillage my tents, rain would not fall, and my sheep would starve."

Sonam Ngurbu sat silent awhile, observing me closely. Then he said:

"Our paths have crossed before. You, Sahib, may not know it, but I have seen you often. I had been a month in Shigatse when you came thither last year. In the press of pilgrims during the feast days I could not have drawn your attention. But I saw you going up daily to the temples of Tashi-lunpo, and I heard that you were a friend of His Holiness the Tashi Lama. I perceived, then, that

you are a man of consequence, though your caravan is so small and unpretentious."

The good Tashi Lama thus came unexpectedly to our help in a difficult situation. Sonam Ngurbu told every one who would listen that he had seen me at the temple festivals, and this increased my importance. It was understood that I was not a man to be treated like any ordinary knight of the road. No doubt, though poor and ragged, I was a high lama from Western lands.

Now all I had to do was to procure money. I wrote to Thakur Jai Chand, the agent of the Indian Government in Gartok, begging him to send the necessary sum to Tokchen where I should soon arrive. The only difficulty was to send the letter without money. I told Sonam Ngurbu the state of affairs fully, and asked him to send a man of his numerous retinue to Gartok with the letter.

"If you were with me at home," he replied, "I would willingly forward your letter, but here I am myself a stranger, and it would cost me my head were I to meddle with the affairs of another province."

While we were discussing the matter a servant came in to announce that Jamtse Singe, the prior of the monastery, was coming. We hurried out to see the show. It was an exceedingly comical sight. His reverence walked with slow solemn steps and bowed head, letting the beads of a rosary slip through his fingers. He was not alone, but walked in a procession. Beside him strode another lama, two younger monks followed, and two novices came last. In consequence of the mixture of affected simplicity and pompous solemnity the procession was indescribably ridiculous. The servants of the church, however, caused a great stir among these children of the world, and inquisitive Tibetans stood gaping at all the tent doors.

The prior did not vouchsafe us a single glance. He stalked slowly past us, making for the tent tenanted by a lama of Chokchu who was one of Sonam Ngurbu's followers, Namgyal Dorche. First the church then the temporal rulers!

But it was not long before another messenger announced that the prior, this time alone, was on his way to Sonam Ngurbu's tent. Then we went out again, and the chief's brothers as well as some other gentlemen joined us. All saluted Jamtse Singe with the greatest respect, bowing low and throwing themselves on the ground. He passed his hand in blessing from one head to another, and held out both his hands to me.

Now there was much affectation, and many ceremonious speeches were made on the question of who should occupy the seat of honour opposite the entrance. Every one knew that the seat was by right the prelate's, but the host had much trouble to induce him to take possession of it. At last he succeeded, and Sonam Ngurbu and I placed ourselves beside him with the low table between us. I recognized herein the Chinese ceremonial which does not at all suit the natural rude character of the Tibetans.

On hearing the self-conscious bandit-catcher and the right reverend monk pay court to each other in a flood of flattering speeches, one could not help thinking that they must be close friends and entertain unbounded respect for each other. One would never imagine that they were really like cat and dog. Sonam Ngurbu was superstitious, and had a bad conscience like all pilgrims in Tibet. He feared that the monk by cunning incantations might spoil all the fruits of his pilgrimage and turn them to evil. This was also why he had taken his own confessor with him. Jamtse Singe, on the other hand, as he afterwards told me himself, regarded the temporal chief as a spy, who might at any time calumniate him to the Devashung in Lhasa. Therefore, he was very reserved towards me as long as Sonam Ngurbu was in Selipuk, or the latter might have reported him for showing hospitality to a European.

Sonam Ngurbu did not change his bearing towards me on account of his guest. On the contrary he dwelt on my friendship with the Tashi Lama, and the prelate became decidedly more affable. He smiled and listened with

interest as I enumerated all the monasteries I had visited in southern Tibet and related some adventures. There were several among the men present who could confirm my statements. For instance, the steward of Selipuk had been the year before in Raga-tasam, and a lama, twenty years old, had been in Lehlung-gompa when I drew the pillars of the temple hall. A man in the service of Sonam Ngurbu had been present when Lundup Tsering and his horsemen had protected the Dangra-yum-tso from my intrusion. Here, then, were four men who had seen me before at different places, and perhaps this was partly the reason why no alarm had been raised at my arrival in Selipuk. What could be done with such a bird of passage? And, besides, a caravan of only six men with six horses and mules could not be dangerous.

"Well, now, let me see at least the temple hall of Selipuk," I proposed.

"Never! A European has never been here. If a Peling were admitted into the hall of the gods all the monks would die."

"Nonsense! You have heard that I was repeatedly in Tashi-lunpo, and that the Tashi Lama has not died in consequence."

"Yes, he is great and powerful and can exorcise every danger. But I possess no such power, and have no authority to show the monastery to strangers."

Our conversation was interrupted by the cook, who looked into the tent to announce that dinner was ready. I never ate except in the morning and evening, but now out of regard for my host I had to greet with a friendly smile the china bowl in which the soup, the *pièce de résistance* of the meal, was served. Such a bowl was placed before each guest, but the host had one of costly nephrite. The soup was very strong. It contained solid pieces of yak meat, rice, and Chinese macaroni, all flavoured with onions, pepper, and salt. It was eaten with pewter and wooden spoons, and the Tibetans, both laymen and ecclesiastics,

exhibited an enormous appetite. They held their soup-plates close under their mouths, supped and smacked their lips and fished the scraps of meat up with the spoons, never removing their eyes from their food. They ate like gourmets, silent and serious; they might have been engaged in a religious function which might not be disturbed by everyday talk. For the credit of the cook, and as an excuse for the gentlemen's appetites, I must say that the soup was really excellent. Boiling hot and nourishing, it spread an agreeable glow all through the body; the macaroni and rice were done to death; the rest might be left by one who was not armed with Tibetan fangs which can chew to pieces tough yak meat and gutta-percha. The Tibetans began with the meat, then scooped out the rice and macaroni, lastly drank up the liquid, and put the empty plates on the table again with a sigh and other Asiatic noises betokening satisfaction. They did not remain long there. The cook, who was watching at the tent door, fetched them out, refilled them and placed them before the guests to be cleared again.

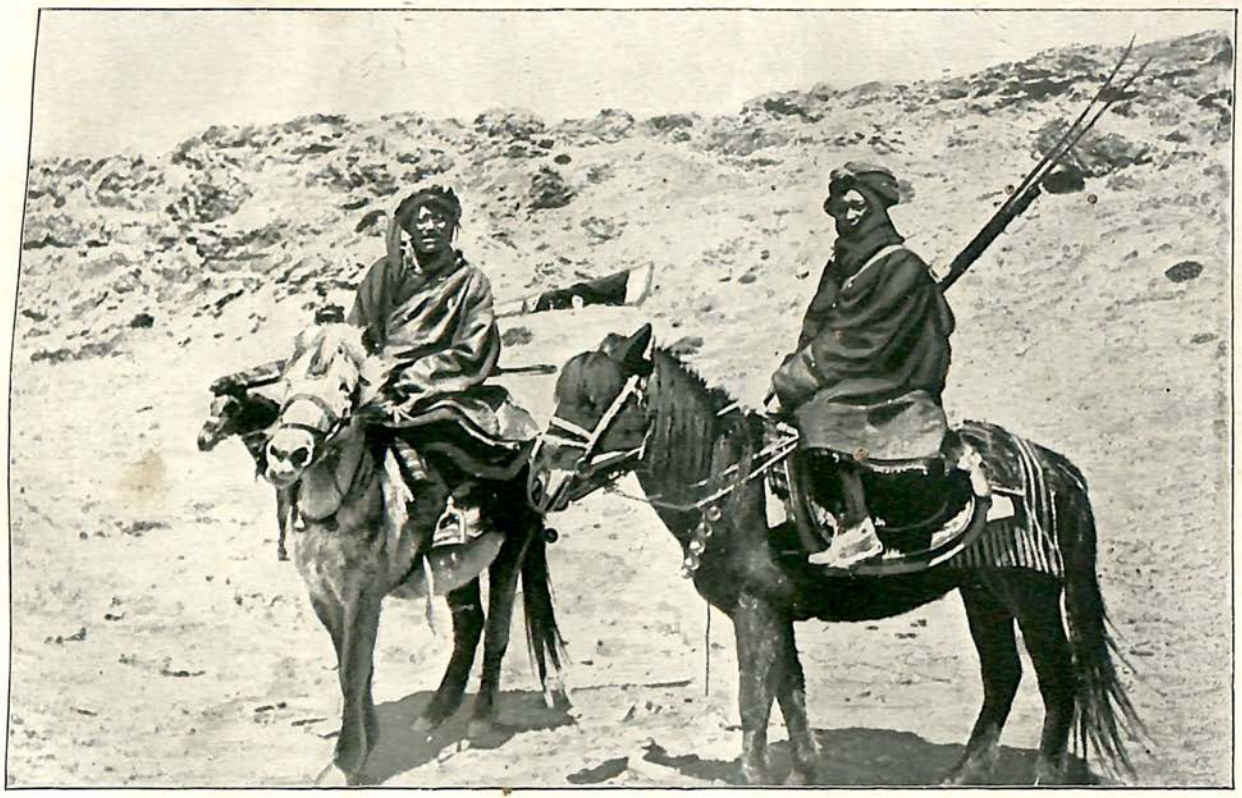
After dinner the massive black teapot of burnt clay was passed round. Dinner, indeed, is only an interruption of the tea-drinking which goes on all day. The Tibetans have a remarkable capacity for drinking one cup after another of thick muddy brick-tea. I should have burst if I had attempted to emulate their achievements in this respect. The tea is of the poorest kind, the refuse and small twigs from Chinese tea plantations. It is compressed into brick-like blocks which are wrapped in paper, sewed up in bales, and despatched to Tibet. The porcelain cups also come from China. They are always tasteful and delicate, and have generally saucers and shield-shaped covers of silvered metal. The beverage is mixed with butter, which floats in small yellow blobs on the top of the tea. All who drink it have a shining ring of butter round their mouths. When you have taken a drink the waiter comes at once with the black pot to fill up the cup again.

Sonam Ngurbu, puffed out and satiated, stark naked down to the hips, and with waving hair hanging down over his copper-brown shoulders in tangled locks, at last took his long thin Chinese pipe, filled and lighted it, smoked and puffed and filled the whole tent with the acrid fumes of bad tobacco from Bhotan. The metal bowl of the pipe is small and contains only enough tobacco for a couple of puffs. When the fine yellow powder is burnt out, the pipe is emptied by tapping it on a wooden disc attached to the châtelaine, and when refilled is lighted from the embers thus preserved. In this way the tedious business with glowing coals and flint and steel is avoided in a country where matches are still unknown.

Jamtse Singe had only the right arm bare. He wore a violet vest with yellow borders and over it the usual blood-red lama toga. His head was uncovered and his grey-besprinkled hair was cut short.

When Jamtse had enjoyed enough of the good things of this world he said good-bye to Sonam Ngurbu, laid his hand on his head to bless him, and returned to the tent of the lama of Chokchu, whither I followed him. This prelate was named Namgyal Dorche, and he was a small agreeable and humorous man. He was also exceedingly picturesque in appearance. He wore a yellow mantle with wide sleeves over his red toga, a rosary wound twice round his neck, and a silver case containing a small image hanging by a string. A shield-shaped hat of gilded wood covered his head and was fastened by a string under his chin. He had on his nose Chinese spectacles with large round glasses of rock crystal which gave him the air of a learned theologian. With this colleague Jamtse Singe was frank and unembarrassed, and he even promised to do his best to get my letter sent to Gartok.

Sonam Ngurbu had two brothers. The three had two wives among them, which works out at two-thirds of a wife per man. These ladies left much to be desired in feminine grace, cleanliness, and youthfulness, and it is no wonder



TWO OF SONAM NGURBU'S HORSEMEN.

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that his share was enough for each brother. Their faces were painted dark brown, they wore in their ears silver plates and pendants of beads and turquoises, ribands hung from their pigtails down their backs, whole sashes, with shells, rupees, and silver ornaments sewed thickly on them. How matrimonial squabbles are settled in such a singularly composed family is hard to understand. Probably they do not occur. In Tibet jealousy is unknown, and conjugal fidelity is an unknown and superfluous virtue.

Not till dusk did Kutus go for my riding horse. Meanwhile I took leave of Sonam Ngurbu, who was sitting in the women's tent with only ladies about him. Some of the beauties who were not painted looked quite pretty, but they are always substantially built and masculine.

Then I returned to my own home on the river bank. There the Gova of Selipuk and his staff were waiting for me. He had considered the matter and now promised to send my letter to Yumba-matsen in two days, and thence in nine days more to Gartok. It would be carried from tent to tent and reach its destination over the Jukti-la.

The day abounded in varied incidents, and it ended in an unusual manner. It was half-past six o'clock, I had gone to bed, and the light was out. A violent gust of wind swept over the country and was followed by a strong earthquake. The first shock passed immediately into a circular movement of the earth's crust. Then came a vibration twice repeated, and finally a short tremble was felt which became weaker and then ceased altogether. Ten minutes later came a second shock, succeeded after five minutes by a third. The first shock gave us a feeling of uneasiness and insecurity. Kutus called out, "Ya Allah!" and the other men awoke and talked excitedly. Only the dogs took no notice. This was the second time I had experienced an earthquake during the twelve years I had spent in Asia. The first was in the year 1895 at Tash-kurgan on the Pamir.

No frost on the night of June 28; the minimum was only 33°. Two monks visited me, sent by the prior of Selipuk, to inquire if I had felt the earthquake and what it meant. Earthquakes had been felt before in this country but not often. They also wished to know if I could control at pleasure the weather, winds, and rain, and, if so, would I summon the rain-clouds to water the dried-up meadows of Selipuk. But I assured them that I had nothing to do with the precipitation, and could not alter the paths of the winds and clouds. But one can always prophesy, so I foretold heavy rains in the near future. Fortunately I was right. The reader will soon be convinced of this when we are beyond the holy lake. There I often rejoiced as I heard fresh showers patter on the slopes, and thought of my dear nomads and of the grass that would spring up, sucking moisture out of the earth to feed the flocks and bring general prosperity to the black tents during the coming winter.

As early as about six o'clock the Tibetans of Chokchu began to drive their yaks, sheep, and horses into camp from the pastures. The great Sonam Ngurbu would continue his pilgrimage to expiate his sins by walking round the holy mountain. But he would not leave without bidding me good-bye, and honoured me with an early visit to my tent, bringing me as a token of friendship a present of sugar, rice, *tsamba*, and delicious white Chinese wheaten flour, which postponed the terrible moment of starvation for a few days more. In return I gave him a silver watch and chain, and we parted the best of friends.

It was an age before the immense caravan was ready to march. The tethered yaks stood in long dark rows waiting hours for their loads. The horses became impatient and made their way off to the pastures again. However, the tents were taken down one by one and packed up, and by eleven o'clock the van of the yak detachment was ready to set off westwards. Half an hour later the next column followed in the track of its comrades, and

still another after an hour more. The yaks grunted and marched lazily under light loads in a closely packed mass; the drivers and leaders followed at their heels, some of them armed with guns, others with a cudgel horizontally across their backs and tightly held under their arms. All marched bareheaded with light quick steps and whistled merrily, shouted, and sang.

Then came the turn of the sheep which, nodding and tripping like a lively brook, waltzed through the Sumdang-tsangpo. Sitting under my felt awning I observed with attentive eyes this cheerful departure, this wandering of men and animals to the mountain of the eternal gods. The horses were again collected, and most of them were saddled while the rest carried loads; we counted sixty of them.

At last the white and blue tent of the chief stood on the plain alone, surrounded by a dozen horses and mules. At the moment he stepped out we saw the tent lowered to the ground, quickly rolled up with its poles and ropes, packed on horses and carried away. When the pilgrims were in the saddle I went off to the place where their path crossed the river. The troop reached the bank in a short gallop and plunged through the water to the spot where I was waiting. Here all the riders dismounted except the women. We once more said good-bye, expressed our pleasure that fate had brought us together, wished one another a good journey, and hoped to meet again at Tokchen.

Then Sonam Ngurbu leapt on to his white horse, which bore a coloured cloth under its saddle, and handsome trappings, and was decked with tassels and other ornaments. He had confined his unkempt hair under a red turban, and round his neck he wore a rusty arrow-head, which brought him good fortune in war and success in thief-hunting. At his left side hung a large silver case, a portable temple, and his sabre stuck out horizontally from his girdle. The wives sat man-fashion on their little spirited horses, with their felt

boots thrust into the stirrups, and their hoods over their heads. The rest of the troop were equipped as for a campaign. They carried sabres and long lances with flat steel heads, and polished strips of steel wound like snakes round the shafts hung by straps from their shoulders." They were also encumbered with clumsy muskets and their long sharp-pointed forks, which would prick the eyes and ears of their next neighbour if he did not look out. Now the wild horsemen thrust their lances against the ground and swung themselves into their saddles with the dexterity of acrobats, and the troop dashed away in a cloud of dust, and soon disappeared behind the monastery hill. After Sonam Ngurbu had gone the steppe looked empty and desolate. Only two poor nomad huts stood there, and two dogs rummaged about for offal.

Feeling lonely I went up to the monastery, the doors of which had hitherto been as firmly closed to us as the Mendong and Lunkar monasteries before. But now they were opened to me without hesitation. The *nerpa*, the steward of Selipuk, came to meet me, and led me through a great gate into a forecourt, where bales of provisions were piled up against the walls, and were sewed up in yak hides with the hair outside. The bales contained tea and barley, *tsamba* and salt. The wooden saddles of the transport yaks were heaped together in a corner. Various guns and sabres hung on a wall in picturesque confusion. Evidently Selipuk was prepared to defend itself in case of attack.

The *nerpa* told me that the cloister owned 61 yaks and 1012 sheep, which were partly hired out to caravan, partly employed by the monks on their own account. For the rest the monks lived on the voluntary offerings of the nomads. Three monks had attained the rank of a *Kanpo*, six were *Gelong*, and three *Getsul* or novices; besides these there was the *nerpa*, who attended to their worldly business.

A staircase leads into a cave-like room called *simkang*, which is dim even in the middle of the day. On a bench

against the wall sat the prior entertaining Namgyal Dorche, his brother in Buddha. They were feasting and drinking tea. The guest from Chokchu held in his hand a leg of mutton, and cut pieces off it, which were quickly crunched by his strong teeth. The meat was raw, old, and dried, and consequently as hard as wood. Dried peaches, raisins, and sugar were placed before me. We talked and jested together, but they would not let me into Buddha's temple.

Then the visitor rose. He belonged to Sonam Ngurbu's household, and must not be late in overtaking the others. We accompanied him down into the court, where two novices were waiting with three red-bridled horses. In his red cowl with his gilded shovel hat above it, this bundle of clothes was a splendid incarnation of the Lamaist cult. He said farewell politely to the prior and myself, and off he went over the hill.

As long as a glimpse was to be seen of the departing guest and his two companions, Jamtse Singe stood in silence, but as soon as they disappeared his manner changed as though by magic. He suddenly became another man. With a sly smile he invited me to go up into the *simkang* again, and there he was excessively lively. I understood him. He felt now free from all supervision and espionage. He was now sole master in the house, and could do as he liked. The other monks also came in, and were equally delighted.

Then appeared my friend the village headman, accompanied by some other Tibetans. They handed me a lump of barley-sugar and a copper bowl of milk, and then they threw themselves down full length in front of me, touching the ground with their foreheads, and behaved just as if I were an image of Buddha. I asked in astonishment what this conduct meant, and learned only too soon the answer to the riddle. It was a long tale.

The sheep of the monastery had just returned from a district in the north where a fine and much-prized china

clay occurs. They were laden with it, and were now to go on to the fair at Gyanima, where the china clay was expected to fetch two rupees a sheep's load. All the men of the monastery were, then, required as drivers, and they must withdraw their promise to forward my letter to Gartok.

I pretended to be enraged.

"Did you not tell me yourselves that there were 60 tents under the rule of the monastery? Did you not say lately that the nomads brought the wood and water that the monks required, and watched their flocks on the pastures? And now you are supposed not to have a man free to ride to Yumba-matsen."

"Forgive us, Sahib, all are now engaged. Permit us to oblige you in some other way."

"Very well, I will forgive you if you show me the hall of Buddha."

"With the greatest pleasure," cried Jamtse Singe, rising and drawing us all in procession to the *lhakang*. The doors were opened wide, and the mysteries were exposed to my gaze. But there was really nothing worth looking at. The hall was small and dark. An assemblage of gods stood on the altar table, among them Sakya-toba (Buddha) and Tsong Kapa. All the usual strips and pictures hung from the roof, and spears, sabres, and guns were fastened to the pillars. The whole show was like a marine store, a scene of religious still life faded and corroded by time and covered with the dust of centuries. The shelves were almost breaking under the weight of the holy books, hideous masks grinned out of the corners, and two temple drums stood between the pillars, waiting to rouse the attention of the gods when the monks mumbled their prayers in the day or night.

My stock question: "How old is this monastery?" was answered as usual with the words: "It has been here from the beginning." This has the same significance as the first words of the Bible and one thinks of an astounding age. But when the prior subsequently admitted that a

Rinpoche or incarnation named Gerung Lama had founded Selipuk, its age was considerably reduced. To judge by its exterior the monastery can scarcely be more than two hundred years old.

The portal of the *lhakang* faces east as always. Numerous *mani* walls surround the cloister compound, and a wall which forms a forecourt and a fold for the sheep of burden. There, too, lies the holy monastery dog chained up, which barks whenever any one approaches.

At dusk I bade farewell to the friendly monks.

When night came on the sound of noisy music reached my tent. Drums rolled, flutes were blown, and bells and rattles rang. Service was being held in the hall of Buddha.

The noise died away, and Jamtse Singe came alone to us in the darkness. He called out to us from a distance to keep hold of our dogs that he might gain my tent without being bitten.

"Do not be cross, Sahib," he said, "because I have not returned your visit before. I durst not as long as Sonam Ngurbu was here."

"It is of no consequence. You are always welcome. Sit down and take tea with me."

"When are you coming to us again, Sahib?"

"Perhaps in two years," I answered, as if it were quite a settled matter.

"Will you be so good then as to bring me two presents, first a revolver and then some kind of salve which will make hair grow. I intend to grow a moustache."

"What in the world do you, being a monk, want with a moustache?"

"Well, I was in Lhasa four years ago when the English broke into the Potala, and one of the strangers assured me that a man who wore a moustache could never fall ill."

"That is all a lie, I can assure you. But now, tell me, have you kept your promise of yesterday and consulted your holy books about the fate of my lost caravan?"

"Yes, certainly. The books say that your servants are

alive and that all is well with them. They are now somewhere to the south of this, and in twenty days you will meet them, or at any rate receive reliable news of the caravan."

Truly the answer of an oracle! Within four-and-twenty hours I was to have good reason for abandoning faith in the utterances of Lamaist books.

Jamtse Singe was given a few trifles I was able to spare. In return he gave me a *tenga*, barely 6d., adding that the sum was certainly small but that the coin would have the effect of a talisman; as long as I retained it in my possession I should never come to want. Then he rose, rubbed his forehead against mine as a sign of friendship, and styled me "Lama Sahib," or, freely translated, Doctor of Divinity.

After he had returned to his small close cell with a hearth in the middle of the clay floor and chests and the bed against the walls, we held a short consultation, and decided to travel on next morning to Tokchen, though we had no money and no provisions.

CHAPTER X

THE MODELS OF KYANGYANG

THE journey I commenced on June 30 was a reckless undertaking. We could hold out a few days more with the presents we received in Selipuk, and the two youths who had accompanied us with yaks from the Pedang-tsangpo fortunately allowed themselves to be persuaded to travel a little farther with us. But first they wanted their arrears of pay. After they had been paid out to them there remained in our money-chest two small silver coins, a *tenga* and a six-anna piece, amounting together to about a shilling. The beggars who crowded round us at our departure thought us stingy because we did not give them even a copper farthing.

I do not know exactly what my thoughts were. I seemed to be venturing ever farther on thin ice which would break at last. The main thing was to keep the men from Pedang as far as Tokchen, if possible, whence I might be able to send a messenger to Gartok. But what would happen if they struck in the middle of the Trans-Himalaya? Well, time would show. One can bear a great deal before one dies, and we must make our way by some means or other.

So we marched past the monastery walls. There Jamtse Singe came out, took hold of my horse by the bridle, and led it for a time with his own holy hand. Then he bowed his adieu, and soon the monastery disappeared behind the hills and was included in the treasure of kind friendly memories I retain of Tibet.

The path traversed an immense plain, the largest I have seen north of the Trans-Himalaya. Three tents and some grazing yaks, otherwise quite lifeless. Hard grass grows in clumps and tufts on hillocks or domes of roots, and the horses are often in danger of tumbling over head first on the uneven ground. We twice cross the winding Sumdang-tsangpo. Its bottom is treacherous, and the horse which Kutus rode almost sank into the mud.

The part of the steppe on which shepherds feed their flocks is called Rartse. There we pitched camp 441. According to my custom I drew a panorama of the mountains around us. Here especially a picture was important for orientation, for the compact walls of the Trans-Himalaya rose in the south. I had just finished the drawing and was inserting the compass bearings of the high summits and deep valleys, when Lobsang came to inform me that four men and as many laden mules were approaching our camp. Astonished and doubtful I examined the little party through my field-glass. They came nearer and grew larger. Mirage made them appear to float a hair's-breadth above the ground.

"The man in the yellow mantle is Abdul Kerim," cried Kutus.

"Sedik and Gaffar are also with him," said Gulam.

"The fourth is a Tibetan," declared Lobsang.

A short time later all our perplexities were cleared up and our anxiety was over (see Vol. II. p. 405). The future shone again in a rosy light. Abdul Kerim brought our remaining 2684 rupees sewed up in small bags, and my financial circumstances were now brilliant. We need deny ourselves nothing on the way to Simla, and the men from Pedang, who had adhered to us in evil times, should be royally rewarded.

Four of our men were still absent; they had baggage yaks and therefore they marched more slowly, but they were now on the right track. The caravan was, at any rate, considerably strengthened when we moved farther

over the steppe on July 1, after nine degrees of frost in the night. The belt of grass came to an end after a time, and in its place an extraordinarily flat fan of rubbish and sand stretched up to the foot of the mountain. On its slope there could be distinguished a whole series of old shore embankments. We could see distinctly how closely they followed the contours of the hills and projecting rocks, how the intervals between them increased over gently sloping ground, and how they closed up together on steep declivities. The highest beach wall stood perhaps 23 feet above the neighbouring ground, and at the uppermost plainly recognizable beach line (15,990 feet) we were 413 feet above the surface of the Nganglaring-tso.

So far the lake had formerly extended, during a period when the precipitation was more abundant than at present. The whole plain near Selipuk then lay under water, and the Tengri-nor in the east had a worthy counterpart in the west, on the northern flank of the Trans-Himalaya. In the course of time the quantity of precipitation diminished, the great lake contracted, and in our day only the salt lake is left, which fills the basin round the rocky islets of Nganglaring-tso. But the old shore lines and beaches still remain, and in them slumbers a fossilized echo of the murmur of the surge of ancient times.

The way led south-west over a small pass and up a grass-grown valley, where we passed the night at the spring Kyangyang (camp 442). Five nomad tents were set up there. Two men hurried out of one of them to advise us not to encamp there for our own sakes, because an old man was dying of an infectious disease in one of the tents. It was the old story. We might be vagabonds, and so they were anxious to get rid of us, and tried to scare us away with smallpox and plague.

Light showers had been falling since noon, and I was glad for the sake of Jamtse Singe and the shepherds. Towards evening arose a south-westerly storm which howled fearfully through the valley. The brazier was more

necessary than ever ; we wrapped ourselves in our furs and could almost believe that another winter was coming on.

We spent three whole days in the Kyangyang valley or, as the whole district is called, in Kyangyang-lobchang, in which two valleys to the west are included. We had to wait here for the four men still missing, Suen, Abdullah, Abdul Rasak, and Sonam Kunchuk. On the evening of July 3 we saw them making with all speed for our camp, and it was touching to witness their joy at seeing us again. They threw themselves down on the ground before me, and embraced their comrades with tears. Abdul Rasak wept so that he could not stand still for excitement. He lifted one foot and then the other, stamping as in a winepress. I was hard-hearted enough nearly to kill myself with laughing at the sight of this uncontrolled delight.

Before the three days were over the people at the spring of Kyangyang had recovered from their fright: they perceived that our intentions towards them were good. An elderly man who had once been the Gova of the place promised us the thirteen yaks we wanted if we would have patience for a couple of days more, and so we could dismiss the men from the Pedang-tsangpo. They received double pay. They had rendered us excellent service, had helped us to discover the Shovo-tso, and to reach the Nganglaring-tso. They set out well satisfied on the same evening to return to their home.

The heralds of the south-west monsoon skimmed like dark shadows over the valley, and on July 2 it rained and snowed alternately almost all day long. The snow did not fall in flakes, but in small round grains which soon melted. In the Trans-Himalaya it snows even in summer ; but then our camp stood 16,330 feet above the sea.

On July 3 also the rain pattered down monotonously until evening. The nomads were delighted. We had brought with us the first rainy days of the year, and perhaps on that account they were so friendly to us. It was impossible to work out of doors. And I could not

endure to sit idle all day and listen to the rain beating down on my dilapidated tent. So our neighbours were informed that every female who presented herself in Abdul Kerim's large white tent to have her portrait drawn should receive a rupee, and every male a *tenga*. The women were to put on their best clothes, and all the ornaments they could get together out of their hiding-places.

An hour passed, and then another, but no models appeared. There was ample excuse for them; they were bashful, and wondered what this invitation meant. Filthy lucre at last overcame their scruples. I heard chains and châtelaines clinking, and saw them coming slowly across the meadows like a wedding procession, with bridesmaids, witnesses, and guests. The Tibetans stood loitering awkwardly between the tents. Then the rain began to pour down more violently, and our guests were glad when Lobsang drove them into Abdul Kerim's tent. It had a long smoke vent in the top through which light entered, but, unfortunately, rain also, and therefore an improvised umbrella had to be rigged up over my drawing-board.

They were really stylish, these ladies of the Kyangyang valley. At first they sat silent looking about the tent or blowing their noses loudly with their fingers. But they soon laid aside their shyness. The Ladakis joked with them, and before long the country beauties were heard chattering and laughing with them as freely as if they too had been born in Ladak. When I told the models that I had finished, and that they might go home, they still remained sitting with us in the tent.

They answered fearlessly my questions about their ages and names, and a young maiden told me with evident pride that the long back cloth was called *pale* in Tibetan, the metal plates *raktig*, and the shells sewed on it *dundok*.

A worthy matron, the thirty-eight-years-old Norsum, wore on her brow a row of silver rupees strung on threads

of coral. On the top of her head she had a red cloth closely studded with cheap coral and inferior turquoise. Her hair was divided into a number of thin tails, into which chains of white and blue glass beads were woven. Her neck was hidden by many rows of coloured glass-beads. The two cloths which hang like veils from the top of the head down over the back are patchwork of green and red stuff in geometrical figures. They are decorated above with rupees, anna-pieces, and Indian copper coins, and little four-cornered silver plates are sewed on in the midst of this collection. Farther down follow scallop shells in double rows, and at the bottom are fixed a number of Indian uniform buttons, some of brass, others silvered, all with the arms of Great Britain, or the initials of a regiment. The Tommy Atkins who wore these buttons could hardly have foreseen that they would one day be the pride of a woman in the eternal snow mountains of Tibet.

I value such a costume at 250 rupees, or about £17. There were 100 rupees on it in cash. The older the ladies the finer they are decked out; the young ones had at most a chain of beads round the neck, and the ornaments of their back cloths were of copper. It must certainly require a long time to complete the collection. All depends on the rain. After copious rain the grass is juicy, the sheep are healthy and grow fat. Then the well-being of the nomads increases, and their wives can afford to buy a necklace from some travelling trader, or sew a rupee on their mantillas. Or a new uniform button reaches Tibet in some mysterious way, and they buy it. Now each of the models could add another rupee to her finery.

Two old women had no ornament at all, but still they waited patiently till their turn came. Apparently they had reached the age when the mother resigns her trinkets to a daughter who has found a bridegroom, or to a young girl who will become her daughter-in-law, at least in part. Thus it may happen that an outfit may take two generations to complete it. Hardly more than two, for life in

Tibet is uncertain ; if the rain fails the grass dries up, the flocks are decimated, and the nomads find themselves compelled by want to sell their trinkets.

The following day I was almost flooded with models. They came from other tents in the neighbouring valleys, where the rumour of an easily-to-be-earned rupee had spread. But now the occupation had ceased to amuse me, and I could spare no more paper. But they received their rupees all the same for their goodwill, and as friendly souvenirs.

The feast of reunion was held on a pitch-dark night, when the rain hissed in the flames of the camp-fire. Suen was master of ceremonies in the caravan. He danced round the fire and led the gleeful songs of Ladak,

The night of July 4 brought us 11.3 degrees of frost. Thirteen yaks stood ready in the morning to take over our baggage. Our own animals were to be spared as much as possible ; we might want them in districts where the people were less friendly disposed than the inhabitants here in the interior, who had never seen a European. The ex-Gova of Kyangyang provided us with a sheep and goat, and procured barley for the horses and butter for the men. He had felt so much at ease in our company that he asked to accompany us for a day's journey, and he was very welcome to me for the sake of the information he could give me about the route.

We ride slowly up between the porphyry rocks of the valley to the pass Kyangyang-la (16,920 feet). Sheep and yaks feed in large numbers on the thriving grass on ground honeycombed with mouse-holes. From the saddle of the pass we perceive near to us the somewhat flat snowy summit of the Lavar-gangri, which we first made acquaintance with at Selipuk. On the farther side of the pass the valley of the Lavar-tsangpo and the river itself come into view, and eleven black tents are set up on its banks. Here we pitched our camp 443.

In the night the temperature sank to 12.4°, on July 6

in 31½° N. lat.! The absolute height explains it. In such a country no mercy is to be expected from winter. For two whole days we followed the left bank downwards, and saw the river gradually increased by water flowing out of the side valleys. At the point where we leave the Lavar-tsangpo we see the river winding off northwards to its confluence with the larger Aong-tsangpo. But before it reaches it the river almost touches the Damrap-tso, a small long lake with banks white with salt. Every step we take is over unknown country never pressed by any but Tibetan soles. The land is still very sparsely peopled, but game occurs in larger quantities than before; I saw kiangs, Panthelops and Goa antelopes, and swarms of hares.

On July 8 we awoke in camp 445 (17,048 feet) in cold windy weather to an interesting day's march. I could perceive myself that we should have to surmount a mountain chain of the first rank, for during the past two days I had seen the snow-crowned crest of a mighty range through the portals of several side valleys. But I did not know whether this range formed the watershed of the Nganglaring-tso.

We had camped in the mouth of the Ding-la valley, where a narrow strip of grass grows by the bank of a babbling brook. The valley is so narrow that there is no room for a path. We therefore clambered over the steep flank of the left side of the valley bestrewn with sharp pebbles of grey granite. Not a square foot of the slope is bare; the ascent is sharp and the horses got sore feet. The yaks did not mind, for no way is impassable for them. Over this detritus the pilgrims tramp to Kang-rinpoche.

The path runs rather high above the bottom of the Ding-la valley, sometimes southwards, sometimes south-westwards. We had therefore a splendid view over the massive, lofty, and wildly fissured mountain barrier along the opposite right side of the valley, which culminates in three similar humps with caps of eternal snow; the lappets of these caps, turned into ice, descend to the valley in the form of hanging glaciers.

A last curve in the road brings us in a southerly direction through more accumulations of granite rubbish up to the hilly saddle which is known as the Ding-la. The streamers of the pass flutter on their stakes in the highly rarefied air, and the cairn, a brother of the clouds, is perhaps the highest on earth that marks a caravan route. It is erected at a height of 19,308 feet above sea-level. In Europe the ascent of Mont Blanc is a height record, and there one has the continent of the white men at his feet. But on the Ding-la one is 3526 feet higher.

And yet the view is less extensive than one would expect. The near-lying crests hide the distant horizon to the north. Only the quadrant between south-east and south-west presents an uninterrupted prospect. There rises a continuous range with a row of small snowy peaks. It appears much less imposing than the Ding-la range. But as a watershed it takes a much higher rank, for from its flanks the water drains to two seas, the Gulfs of Arabia and Bengal, and its brooks flow northwards to the Nganglaring-tso. The Ding-la range must accordingly be broken through by these streams, and is of the second order.

With one of the Tibetans acquainted with the country by my side I scan the southern horizon. Near by to the south-east towers a snowy massive, which sends out from its firn basins short glacier tongues into rocky abysses. S. 22° E. another snowy giant exhibits its royal crown among the clouds, and at its western foot opens the valley Da-teri, its floor still covered with winter ice. Due south we descry the small lake Argok-tso barely a day's journey distant.

After we had listened long enough to the "Om mani padme hum" of the streamers of the Ding-la pass, we worked our way painfully down through the granite pebbles of the other side and encamped at the spring-fed rivulet Lumanakbo, at a height of 16,857 feet (camp 446), where the frozen snow was lashed by the wind against our tents.

CHAPTER XI

OVER THE TRANS-HIMALAYA FOR THE LAST TIME

ON July 9 we directed our march southwards through the labyrinth of the Trans-Himalaya, and then my hydrographical conceptions were gradually made clear. To the east is seen the Ding-la range with its gables and firn-fields and its glacier tongues, from which the melted ice collects into a brook carrying 88 cubic feet of water per second. To the right stands a smaller crest without snow. Large pasture lands lie among the mountains and remains of old nomad camps are numerous.

After a time we are on the bank of another brook which comes from the south, meandering through a broad open valley. Its water, 175 cubic feet per second, is rather turbid and of a dirty green colour; farther down it receives the above-mentioned brook. The united stream then breaks through the Ding-la range in a narrow valley. When I inquired why the road did not rather run along the river instead of mounting the laborious ascents to the Ding-la pass, our Tibetans replied that the narrow passage was quite impracticable.

We lingered a while on the bank of this watercourse, the largest we had met with for a long time. Gulam had always fishing tackle with him, and he caught a good number of fish.

"What is this river called?" I asked one of the Tibetans.

"Nya-mangbo-tsangpo," he replied, without moving a muscle of his face. *Nya* signifies fish, *mangbo* much, and

tsangpo river ; the whole means, then, the river abounding in fish, a name which my informant had apparently coined for this occasion.

"The river is called Argok-tsangpo, sir," affirmed another guide ; "it comes from the Argok-tso."

"Which way does it take ?"

"It unites in the district Aong-dunker with the Aong-tsangpo. The water collects from all the mountains and valleys you see to the south to the Argok-tso, and therefore the Argok-tsangpo is the largest brook in this country." We were also able afterwards to ascertain that the Argok-tsangpo is the main stream and the Lavar-tsangpo only a tributary. The united river is the largest watercourse that pours its water into the Nganglaring-tso.

One is surprised to find the watershed between the Sutlej and the Nganglaring-tso so far to the south. Somewhere or other in the north-west there must be a triple watershed which sends out brooks to the Indus as well as to the Sutlej and the salt lake. But the country there is unknown, and future explorers will find plenty to occupy them in that region. My journey was only a reconnaissance.

Over undulating ground, between densely overgrown swamps fed by springs, our road passes south-westwards. The view is frequently quite obscured, for heavy leaden clouds sweep over the ground, and often a shower of hail beats in our faces. The Argok-tso is near to us, and, as far as we can see, it has a fairly round form. At the foot of our hills flows a third brook, the Surnge-chu, which discharges into the Argok-tso. We pitched camp 447 beside it.

Dark heavy rain-clouds again moved over the mountain crests and thunder growled dully. The camp was hardly ready when the storm broke in earnest. Hail beat on the tops of the tents, and now and then a rain shower pattered down. A large sheet had to be laid over my tent which leaked on all sides. So it had to be ! Now the flocks of the nomads were safe for the coming winter, and their

owners could live without anxiety for the next twelve months.

Towards evening the rain changed into snow, which fell for hours without intermission, this time in large light flakes, which grazed the tents noiselessly, and spread their white carpet all over the country. At night the clouds parted for a time and the moon stood in the gap, sad and blurred, and threw its pale light over the wintry scene around us. The temperature fell to several degrees below freezing-point and the snow crunched under the feet. And, moreover, this was the hottest time of the year. We might fancy ourselves back in the winter of Chang-tang. Our camp stood 16,913 feet above the sea.

Wolves howl near us during the night. We are accustomed to them and take no notice of their ghastly barking. But we have always to think of our horses and mules, which are grazing out in the snow watched by two men. The wolves are certainly bold, for two revolver shots resound through the valley, then all is quiet.

The new day dawned gloomy and threatening, and our march was continued west-south-westwards, over wintry white hills and through crunching snow. The god of storms drove his rumbling chariot through the world of mountains that surrounded us on all sides. The snow lay half a foot deep and covered the treacherous mouse-holes in which the horses stumbled. It caked also, and hemispherical soles clung to the hoofs of the animals. Later in the day, however, the sun got the upper hand, the snow mantle disappeared, and the ground was quite bare when we reached our camp for the night.

The day's march had led us along the Surnge-chu, and we had waded through a large number of its tributary brooks. How different from the dried-up region in which the Indus has its sources! The camping place is called Takche, and six-and-twenty black tents in two villages were our neighbours. The Gova of the place had gone to Purang, but his deputy, a little plump big-boned Tibetan,

promised to obey all my commands. I could have as many yaks for the journey to Tokchen as I wanted. The man told me that Sonam Ngurbu had left Takche the same day; he had prepared the nomads for our visit, and told them they had nothing to fear from us. So the nomads of Takche were friendly towards us from the first.

The men from Kyangyang had done their work and could go. They were well paid and also took with them two dogs which we had no use for. The one was dirty yellow and a disagreeable animal; Little Puppy and Takkar could not bear him. The other was a little brown tyke called Kamduk. Both had joined us of their own free will, and barked all night long without the slightest provocation. Now they were led on the leash back to Kyangyang. But at the very next camp Kamduk was back again, wagging his tail vigorously and barking for joy. After this proof of faithfulness he was spoiled by every one, and he accompanied us all the way to India until he stopped behind of his own accord in one of the first villages. He feared the heat and wished himself back again in the summer snow of the Kyangyang valley.

We stayed a day more in Takche. We wanted to buy sheep, *tsamba*, and milk, and barley for the horses. The weather, too, was not inviting for riding. There was a continual downpour of rain, and the ground was converted into one great swamp of mud. The grass here was more juicy than it had been for several years. I beguiled the time with the pencil and I had not to wait for sitters. They came in shoals, of both sexes and all ages, filling Abdul Kerim's roomy tent, where the atmosphere, laden with the evaporation from dirty nomads and their soaked clothing, soon exhaled a sweet Tibetan aroma. There was sunshine in the tent, while outside the rain ceaselessly swilled the tightly-stretched tent cloth. It was really a great pleasure to sit all day among the sons and daughters of the wilderness, to see them close at hand in garments that had grown on their sheep and yaks, and listen to their

unrestrained gossip and their hearty laughter. In a corner sat a young mother with her baby. She was wretchedly clothed in rags, but well developed, and with an energetic expression. Every time the model's seat was free she came forward and declared that it was her turn, and at last she got her wish.

Quite a popular assembly crowded before the tents when we set out on July 12. They could not possibly be all from the black tents of Takche, and it turned out that many had come from the neighbouring valleys. They had heard that the portrait-drawing would be continued, and they hoped to earn a rupee or *tenga* themselves. But their hopes were crushed, for a new drove of fine yaks was already waiting with their drivers, and the neighbours of Takche could only witness our departure.

The whole country was veiled in a curious mist. The ground seemed to steam, near objects were only faintly visible and the distant heights were quite hidden. The phenomenon was evidently due to the heavy rain of the day before followed by the cold of the night. In the forenoon a smart hail shower fell, and the guide, who had always to walk beside me, said that the hail was of no use, for only the rain could refresh the grass roots. Farther westwards, he said, the pasturage was better, and in a week the community of Takche would remove thither; for so long there would still be grazing on the Surnge-chu.

The ground rises exceedingly gently. We are close to the Surnge-la, a water-parting pass of the first order in the Trans-Himalaya, and yet the land before us is practically level. Mountains stand on both sides but we march along an open valley between them.

"Here is the Surnge-la," remarks my attendant.

"Impossible! The ground is quite level; this is not a pass."

"Yet this is what we call the Surnge-la," he replies.

A singular pass! Not the smallest gutter of water betrayed a fall in any direction. The ground was perfectly

level. After a few minutes, however, we came to a tiny bed running southwards. Now the question was settled; the boiling-point thermometer was brought into action and gave a height of 17,310 feet. The numerous cairns on the pass are misleading, for they are set up a good way to the west of the highest point.

The structure soon becomes more apparent; we ride down a slowly falling valley, the Surnge-lungpa, drained by a brook belonging to the drainage basin of the Sutlej. We had, therefore, crossed the Trans-Himalaya for the eighth time. The Surnge-la pass was much easier than any of the others. It can scarcely be called a pass; it is only a slight flattened rise in a very low part of the system.

From camp 449 (16,132 feet) in the mouth of the Panglung valley we saw to the west-south-west an old acquaintance, the Pundi mountain, which stands at the northern shore of the holy lake. The Surnge-lungpa continues on in the same direction, and now proved to be the upper part of the Pachen valley, to the mouth of which I had made a short visit the year before. During the following day's march we left this valley on the right, and crossed instead over the small pass Yübgo-la and a succession of low hills, and finally through a narrow winding valley.

We had just pitched camp 450 when the sky darkened as at eventide. A little later the hail burst its bonds and clattered down with indescribable violence. The whole country became dead white again, but the white covering was soon washed away by closely falling rain. Only the higher parts of the mountains, where precipitation always takes the form of hail or snow, remained white. There is a splashing and squelching in the wet outside. Little Puppy comes running in, and of course contrives to shake the water out of his coat on to my note-books and maps just under my nose. Then he rolls himself up on his mat in the corner to dry. But he cannot rest. When he hears steps outside he must go out to inspect the passer-by and

growl at him, and then he comes in again to give me another douche.

Towards evening the rain passed into snow. Such is always the order of the weather in high Tibet. First a violent hailstorm, which then passes into rain, and ends in a fall of snow. But how different were the two rainy seasons of 1907 and 1908! During the former there were only some sprinkles of rain a couple of times, while now violent and continuous downpours were always falling.

The next day's journey brought us down the Gellelungpa valley, wedged in between cliffs of hälleflinta and grauwacke. At a place where the valley widens out twelve horsemen overtook us, driving in great haste a herd of yaks and a number of sheep before them. They were from Nepal, and I asked them as they passed, why they were in such a terrible hurry. "Thieves from Tibet stole our cattle," they replied, "so we at once pursued the band. We overtook them two days ago, and we thrashed the scoundrels so soundly that they could hardly walk. But we recovered our animals, and now we are riding hard to get quickly over the frontier and home."

"Where do we cross the frontier?"

"At the pass Chakpalung-la." A name of ill-omen, for it means "Pass of the Robbers' Valley."

"Do not the authorities help you, if you make a complaint to the Devashung?"

"No. The Tibetan Government will not lift a finger to assist foreigners who have been plundered. When we are robbed by Tibetans all we can do is to rush off with all speed into the enemies' country and recover our property by force, or it vanishes like smoke. As you see, we are well armed. Good-bye!"

The spokesman of the Nepalese hurled another curse at the Tibetan scum, and then the singular troop disappeared round a bend of the valley.

We are now in the domain of Tokchen. The district that we have passed through last is named Hor-paryang.

We have still a small pass to cross, the Rigong-la; from its top a small corner of the holy lake is seen in S. 69° W. Otherwise the view is not worth much. Heavy leaden blue-black clouds hang over the whole country, hiding everything. The road passes at last over gently swelling hills down into the valley of the Samo-tsangpo. We pitch our camp on the left bank of the river close to the place where the Gova of Tokchen has set up his summer tents.

As usual the camp was ready and the smoke rose from the fire when I rode up. I dismounted, handed Lobsang my riding-whip, let Gulam draw off my leather boots and untie my sash, threw back my Tibetan mantle, went into the tent, and thanked God that He had permitted my strenuous work to come to a successful end.

Then I lay down on my bed and pondered. Seven months had passed since we left Ladak. I had traversed in many directions the great blank space north of the Tsangpo, the upper Brahmaputra. I had gained my end, done my duty, and could now take the road to India with an easy conscience.

But before we commence our journey back through the Sutlej valley let us pause a moment here after the eighth crossing of the Trans-Himalaya and recall to mind what was known in past times of this mountain system. And let us pay homage to the memory of those men who have contributed, each his share, to the knowledge of the Trans-Himalaya. They touched principally the eastern and western wings. The centre, the "white patch," remained for me. Therefore I had the good fortune to be able to set aside theories which had been formulated on various occasions, to connect together the two wings, and prove that the Trans-Himalaya is a single, connected system consisting of a host of different ranges, a folded system of the earth's crust, which, indeed, is surpassed in loftiness by the Himalayas, but is their equal in massiveness and importance.

CHAPTER XII

THE TRANS-HIMALAYA IN ANCIENT TIMES AND THE MIDDLE AGES—THE CATHOLIC MISSIONARIES

It seems to us wonderful that huge areas of southern Tibet, a country so near to the frontier of India, and only two hundred miles distant from English railway stations, have preserved their secrets until the present day, and that no European eyes have beheld their scenery. Five years ago I succeeded in forcing my way through their once inexorably closed portals of rock, in sketching the main lines of hitherto unknown mountain ranges, in tracing watercourses of which no rumour of their existence had penetrated into the world of white men, and in pitching my tent by the shores of lakes where till then no European had listened to the song of the waves.

The goal of aspiration for centuries, the poles of the earth have in the course of those five years been reached. They were considered inaccessible. Nothing could be harder of accomplishment than to travel to one of the poles with dog teams. And yet both poles have been conquered in the exciting chase, for which national vanity and the palms of victory waving at the end have supplied the impulse. Bold men were pressing on towards the poles at a time when so many mysteries lay unsolved in the deep valleys where the Indo-European rivers have excavated their channels. Flags were planted at the poles before the storming of the heights of Gaurisankar, Kanchanjanga, or Mount Everest had even commenced. The future will show that the loftiest peaks of the world are less

easy of access than the two points through which the axis of the earth passes. The fact that the country to the north of the upper Brahmaputra was only attained a few years before the poles, shows that the roads leading over the boundaries of Tibet into the interior are not strewn with roses.

From the jungles of Bengal, from the luxuriant vegetation of the Ganges valley, and from the plains of the Punjab, wooded heights rise up to bare steep cliffs and precipitous ramparts, to wildly-fissured jagged mountain massives, and finally to the domain of the petrified kings, crowned with eternal snow, that look down over suffocating steamy India. Out of reverence to this mysterious icily cold and inaccessible world the old Hindus, the people of the plain, located the habitation of their gods and their holiest places in those high regions which were beyond the reach of mortals.

But the religious faith of the Hindus has not peopled all the Himalayas with gods, and not everywhere in the high mountains are there pilgrimage resorts. The central Himalayas play no part in their imaginings. The land of Nepal also is mentioned in their classical literature only in obscure and indefinite terms, and the Hindus have travelled so far only in recent times. On the other hand, they have made pilgrimages from remote ages to the source of the Ganges, and they placed their principal gods in that part of the Himalayas where the large rivers rise and collect all the volumes of water which make corn grow on the plains of India and ripen into golden harvests.

The Indian Aryans came from the north-west and passed over the mountains into Kashmir, to the Punjab, and down to the countries of the Indus and Ganges. An original knowledge of the regions where their deified forefathers lived and roamed, remained in their consciousness as a misty remembrance from the hoary past, and therefore the country round the holy lakes and the river sources were also the dwelling-places of their gods. (See Anton,

Freiherr von Ow, *Hom, der falsche Prophet aus der noachitischen Zeit*, p. 152; and "Religionsgeschichtliches aus Sven Hedins Transhimalaya," in *Anthropos*, v. (1910), Nos. 5 and 6; also Lassen's *Indische Altertumskunde*, etc.)

According to the ancient Vedic books Asia lay floating as a lotus blossom (*padma*) on the surface of the ocean. The blossom had four petals, and the one pointing south was India. Amidst the mighty mountain summits which fructified the earth with their rivers stood Meru, the mountain of the gods, the loftiest elevation in the world, like a fruit germ in the middle of the flower. Meru included the whole high region which extends northwards from India. All Tibet belonged to it. Not only the Aryan Hindus raised their hands to the mountains from which, according to their belief, their help came, but other people also living in the surrounding lands lifted their eyes to the mysterious heights. To the Burmans the snowy land is the dwelling of the departed after death, and even the Chinese have chosen the Kwen-lun, a part of Meru, as the abode of their oldest saints.

From this Meru flow five enormous rivers, the Ganges, the Indus, and the Oxus to the south and west, the other two to Siberia and China. Threefold ranges of mountains border Meru on the south and north. The three on the south are: Himavan or Himalaya, close to India; Hemakuta, or the mountains with the gold-glittering summits; the third, "The Best among the Mountains," serves as the throne of Indra, the god of rain and storms, who launches the glistening bridge of the rainbow across the vault of heaven after he has made his thunder rumble over the earth. This third range is Kailas, the paradise of Siva, the home of the gods. Beyond the holy lakes, and beyond the holy sources of the Indus, Sutlej, Brahmaputra, Ganges, and Jumna, it lifts its sunlighted head above a country unmatched on earth for lofty majesty and grand solitude.

Mythical poesy has peopled Kailas with a host of wonderful figures. Above it rises the heaven of Siva, and to attain to it after death is the object of the most deeply felt desire—a feeling shared also by the Tibetans. In the *Cloud Messenger* Kalidasa sings of the aerial flight of the holy alpine swans to Kailas and its neighbours, which shine like white lotus blossoms high above all the lands of the world, a reflection of the smile of Siva and the light of Mahadeva. Kailas, the crystal, is the origin of the divine rivers, and there is worshipped the imprint of Rama's foot.

Thus the old Aryans, forefathers of the Hindus, enveloped this world of impenetrable mountains in a tissue of legends and lyrics, and made them the scene of heroic deeds and of the wonderful incidents of epical and mystical fancy. Out of the darkness of Indian legends a scarcely audible whisper from the Himalayas at last reached the west, by means of accounts based on rumours and attributable to Phœnician and Persian merchants. Herodotus tells of the gold-digging ants to the north in cloudland, a tale which originated among the old Hindus. He says that the singular ants are smaller than dogs, but bigger than foxes. Nearchus states that he had himself seen a skin of the gold-digging animal in Alexander's camp, and found that it resembled the fur of a panther. In our days the legendary ants have been turned into marmots, which dig holes in the ground, and throw up heaps of earth and sand before the entrances of their retreats, in which perhaps some gold-dust may occasionally be found.

The geographical writers and historians after the time of Alexander mention only the lofty chain which skirts India on the north. Megasthenes calls the Himalayas Emodos, a name which Pliny also employs. Arrian gives the name of Caucasus to the western part of those mountains. Pomponius Mela makes the Taurus the northern boundary of India, which extends its mighty ridge, in his opinion, which had also been that of Eratosthenes, from Asia Minor

to the farthest east. Strabo states that as a traveller proceeds eastwards from the Hyrcanian or Caspian sea the mountains lie to his right, which the Greeks name Taurus and which extend to the Indian sea. Of the lofty mountain masses which lie beyond Bactria and Sogdiana and the land of the wandering Scythian herdsmen, he says: "All other mountains, from the land of the Aryans onwards, the Macedonians named Caucasus, but among the barbarians the various parts bear the names Paropamisus, Emodus, Imaus, and others of similar sound." In another place he repeats the same idea in the following words: "India is bounded on the north, from Ariana to the eastern sea, by the last parts of the Taurus, which the natives call by the names Paropamisus, Emodus, Imaus, and others, while the Macedonians name them Caucasus."

In the second century A.D. Ptolemy, the greatest geographer of antiquity, wrote his famous work, laying the foundation on which in later times Arabians and Europeans built.

The name Imaus in Ptolemy's system embraces not only the eastern part of the Hindu-kush and the western part of the Himalayas, but also the eastern marginal chains of the Pamir. Accordingly the Imaus, which runs north and south, divides the western Scythia from the eastern, while the part that runs east and west, corresponding to the Himalayas, forms a boundary wall between India intra Gangem fluvium and Scythia extra Imaum montem, the country in the southern part of which are piled up the mighty chains of the Trans-Himalaya.

The whole of the Middle Ages lived, so to say, on the wisdom of Ptolemy, and his world system acquired dogmatic sharpness in the minds of the learned. For eleven hundred years the high-born rivers flowed down from their holy sources, and the dark cloud-masses of the monsoon struggled with the sunshine for lordship over the Trans-Himalaya and its neighbours. Europeans had no suspicion of the existence of the highest elevation on earth. Like a

fortress protected by massive ramparts and full moats, unknown Tibet dreamed in undisturbed peace. How long would it be before the outer walls fell? Seventeen hundred and fifty years were the winter storms to sing their ancient hymns over the lofty mountain land of Bongba before its last defences fell before the assault of European exploration.

When the earth had made its eleven hundredth revolution round the sun, the first meagre report of Tibet reached Europe. The Mongols had fallen upon the world of the white men, devastating all the country. To obtain information about the home and conditions of life of that warlike people, the Pope in the year 1245 sent Piano Carpini to the Great Khan. This ambassador heard of Tibet during his long journey. "The inhabitants of that land are pagans," he says; and then adds: "They have a most astonishing or rather horrible custom, for when any one's father is about to give up the ghost, all the relatives meet together, and they eat him, as was told to me for certain."

On his celebrated journey, during the years 1253–1255, the object of which also was the court of the Great Khan, the excellent Franciscan monk William de Rubruquis learned that beyond the Tanguts dwell the Tibetans, "a people in the habit of eating their dead parents so that for piety's sake they should not give their parents any other sepulchre than their bowels. They have given this practice up, however, as they were held an abomination among all nations. They still, however, make handsome cups out of the heads of their parents, so that when drinking out of them they may have them in mind in the midst of their merry-making. These people have much gold in their country, so that when one lacks gold he digs till he finds it, and he only takes so much as he requires and puts the rest back in the ground; for if he puts it in a treasury or a coffer, he believes that God would take away from him that which is in the ground. I saw many misshapen individuals of this people."

Rockhill, who has edited and annotated the best edition of Rubruquis' narrative, doubts whether the Tibetans were cannibals in the Middle Ages. On the other hand, there is still at the present day scarcely a temple in Tibet where human skulls are not used, both as drinking vessels and as religious drums. (Such a drum is depicted on p. 1174 of the second volume of my book *Through Asia.*)

During the twenty years (1275–95) of his sojourn at the court of the Emperor Kublai Khan, Marco Polo, the most illustrious traveller of the Middle Ages, heard various reports of Tibet and describes it as follows :

This province, called Tebet, is of very great extent. The people, as I have told you, have a language of their own, and they are idolaters, and they border on Manzi and sundry other regions. Moreover, they are very great thieves. The country is, in fact, so great that it embraces eight kingdoms and a vast number of cities and villages. It contains in several quarters rivers and lakes, in which gold-dust is found in great abundance. Cinnamon also grows there in great plenty. Coral is in great demand in this country and fetches a high price, for they delight to hang it round the necks of their women and of their idols. They have also in this country plenty of fine woollens and other stuffs, and many kinds of spices are produced there which are never seen in our country. Among this people, too, you find the best enchanters and astrologers that exist in all that quarter of the world ; they perform such extraordinary marvels and sorceries by diabolic art, that it astounds one to see or even hear of them. So I will relate none of them in this book of ours ; people would be amazed if they heard them, but it would serve no good purpose. These people of Tebet are an ill-conditioned race. They have mastiff dogs as big as donkeys, which are capital at seizing wild beasts (and in particular the wild oxen which are called *Bayamini*, very great and fierce animals). They have also sundry other kinds of sporting dogs, and excellent lanner falcons (and sakers), swift in flight and well trained, which are got in the mountains of the country.

In conclusion Marco Polo states that Tibet is subject to the Great Khan.

In the year 1328 the Franciscan monk Odorico de Pordenone travelled from Shan-si through Shen-si, Se-chuan and Tibet. Henri Cordier, who has prepared the best edition of the monk's narrative, supposes that in the second section of his journey, of which no report is extant, the monk passed through Badakshan, Khorasan, Tabriz, and Armenia, back to Europe, where he arrived in the year 1330. His name deserves to be kept in memory, not only because he achieved one of the most remarkable journeys through the midst of Asia, but also because he was the first European to pass through Tibet and to visit Lhasa, that maiden city which for five hundred years longer excited the curiosity of European travellers, and in their imagination displayed façades towering to the skies under golden temple roofs. Odorico mentions Lhasa Gota, which, according to Cordier, is a corruption of the name Potala borne by the monastery palace of the Dalai Lama. The country he calls Riboth; he knows that it borders on India, and says:

> This kingdom is subject to the Great Khan, and there are found bread and wine in much greater abundance than in any other part of the world. The people of this country live in tents of black felt. Their chief city is very fine, all of white stone, and the streets well paved. It is called Gota. In this city none dare shed human blood, nor of any beast, out of reverence to an idol they worship there. In this city dwells the *obassy*, that is to say their pope in their language. He is the chief of all the idolaters, and bestows the benefices of the country at his pleasure.

Odorico also knows how the Tibetans deal with their dead, that the priests cut off the head from the body and give it to the son, who makes of it a drinking-cup, from which he drinks to the memory of his father; while the body is cut up and thrown to eagles and vultures, who, like the angels of God, conduct the departed to the joys of paradise.

Again three hundred years passed away without any

new information reaching Europe about the Land of Snow, as the Tibetans often call their home among the mountains and valleys. Three hundred years the fortress held out, and strangers never crossed its fosses. Storms swept the snow down the flanks as before, and caused it to flutter down like white kerchiefs from crest and peak. The wind groaned and piped round the rocky spurs, and the waves beat sadly against the lonely shores of the lake of Brahma and the Tengri-nor. Safe and undisturbed as in a sanctuary, the nomads migrated with their black tents from one pasture to another just as in the days when Odorico was in their country.

In the year 1625 Father Antonio de Andrade travelled to Tsaparang. We shall speak of him later when we come to that country. Now we will cite only those travellers who have touched on the Trans-Himalaya during their wanderings. We have seen that the Hindus of ancient times knew no other part of this system than Kailas. Whether Odorico crossed the eastern ranges of this system is unknown. But now modern times have instituted a more thorough knowledge of the earth by their more rigid demands. During this period the wings of the Trans-Himalaya will be made known by degrees.

In the exploration of the earth there is hardly a grander and more enchanting problem conceivable than the connection of these two wings and of the delineation of the whole system. At any rate I have never faced a more splendid task. Therefore I dwell with pleasure on the remembrance of those travellers who in earlier and more recent times have contributed stones to the tremendous structure which is now completed in its main features. Perhaps it is also worth while to inquire how one of the most gigantic folds of the earth's crust, which stands as firmly in its rigidity now as in the days when the Vedas were written, gradually emerged from the night of folklore and legend, how it was unveiled little by little, grew more and more towards completion on the maps of Europeans, like a game of patience,

and at last stood fully revealed to geographers as one of the loftiest, longest, and greatest mountain systems in the world.

The last section, which was yet wanting to form a complete representation of the whole, had an area of about 42,000 square miles, and was therefore larger than Bavaria, Württemberg, and Baden together. On the map were to be read there the words " terra incognita," and they had to be wiped out. When this was done the game was won.

The first traveller who brought back to Europe fuller and more valuable information about Tibet, and who is known with certainty to have crossed the eastern Trans-Himalaya, was the Jesuit father Johannes Grueber, who left Pekin in the year 1661, accompanied by Albert Dorville, a member of the same order, with the intention of travelling through all eastern Tibet by the Kuku-nor, Lhasa, Shigatse, and Khatmandu, and, after his journey was successfully accomplished, came to Agra in 1662. The description of this journey does not do justice to its importance. Athanasius Kircher and Thévenot have published a small number of letters and notes from Grueber's hand, the latter in his noted work *China Illustrata*, which appeared at Amsterdam in 1760.

From this we learn that the two priests crossed the Hwang-ho twice, and that, after passing Sining-fu, they travelled for three months through the desert of the Tatar Kalmukhs before reaching the kingdom of Lhasa, which was called by the Tatars Barantola. Their route ran over plains and mountains, and through rivers with grassy banks, where the herds of the nomads found pasture in sufficient quantity. " There are many who believe that this desert stretches from India to the Arctic Sea." There no other animals occur but " wild bulls." The inhabitants dwell in " portable houses," as Grueber calls what Odorico three hundred years earlier had correctly styled " black felt tents."

In the southern part of the land thus described, between

Nakchu on the Salwin and the Reting monastery, south-east of the Tengri-nor, Grueber and Dorville passed over the heights of the Trans-Himalaya without suspecting that they had thereby added another discovery to the many they had already made during their long journey. That this mountain system does not stand out in Grueber's notes in the sharp relief that is really due to it, and that Kircher does not even mention it, is not to be wondered at, for the ranges on the south of Tsaidam, the huge Tang-la, which, two hundred years later, excited the astonishment and awe of Father Huc, seem to have left no impression on Grueber's memory.

What he seems to have retained better and has described in vivid colours, are the Langur mountains south of the Tsangpo, which correspond to the northern water-parting chain of the Himalayas between Shigatse and Khatmandu. There he was attacked by mountain sickness, and he has ventured to make some very hazardous conjectures to explain the unbearable headaches that throbbed in his temples, all which have been accepted with blind faith by his Catholic successors on the elevated roads of Tibet.

He says that the Langur mountains are so high that men cannot breathee there because the air is much too "subtle," and he adds: "In summer certain poisonous weeds grow there which exhale such a bad-smelling dangerous odour that one cannot stay up there without risk of losing one's life, nay, not even cross the mountains without danger to life." For a whole month one must cross immense mountains and march along awful abysses before reaching the first town in Nepal.

In Kircher's work we read also of the audience the Grand Duke of Tuscany granted to the good Grueber on his return home. Among other questions the Grand Duke inquired whether Father Johannes had travelled from Tatary or the land of the Usbeks into the empire of the Great Mogul, or whether he had come from the east, and whether he had become acquainted with the countries

of Tibet which Antonio de Andrade had described. To this Grueber replied that he had marched westwards from Pekin to Siuing-fu, and that he had been forced by the Great Wall to take a south-westerly course. To reach the territories of the Great Mogul he had wandered through the desert of Tatary and the kingdoms of Barantola, Nepal, and Maranga, and had at last come to the Ganges. " As to the kingdom of Tibet, my knowledge of this country is fairly exact, for both our Jesuit fathers and the Christians who have been there have given me thorough information."

When the Grand Duke inquired whether Father Johannes thought of describing the provinces and states lying outside China, and whether he intended to publish geographical maps of them, he received the regrettable answer that since Father Athanasius Kircher had already made known in his work *China Illustrata*, everything of importance about Grueber's journey, it would be a waste of trouble " to add anything to what had already been said by so great a man and to write a separate book." It seems as if Grueber considered it impertinence or even insubordination towards Kircher to pretend that he could write himself anything better and more complete than was contained in *China Illustrata*.

We recognize on one of Kircher's maps the Himalayas in the " Montes Tibetici," though Kailas, which belongs to the Trans-Himalaya, is included among them. To the north of this mountain we read the words " Tibet Regnum."

Fully fifty years vanished down the stream of time without an echo reaching Europe from the land where the mountains of the Trans-Himalaya bathe their summits in storm and sunshine. Then occurred in Rome an incident which paved the way to the mysterious country. The Capuchin fathers of the province of Ancona applied for an exclusive right to establish missions in Tibet, and they acquired it by a special order of the Congregatio de Propoganda Fide. Accordingly Father Felice da Montecchio, Father Domenico da Fano, and other members of the

Capuchin order set off from Rome in the year 1704 to travel to India and Tibet. Fano arrived at Lhasa in 1707. In his efforts to establish a mission station in the capital of the Dalai Lama he encountered great difficulties, and he returned to the eternal city to obtain more vigorous support from home. In the year 1715 he was again in India, equipped for another attack on Tibet.

Meanwhile the Jesuit father, Ippolito Desideri, had received permission from the general of his order to convert the Tibetans, and after receiving a blessing from the Pope he too started on his way. From India he took with him Father Manuel Freyre. The two travelled through Kashmir to Leh, where they spent the summer of 1715 in learning the language, in the hope of sometime "seeing fruits well pleasing to God's majesty sprout up among the mountains of Tibet."

Desideri left Leh in August 1715 and travelled in the train of a Tatar princess with a large caravan and many attendants through Gartok and past Manasarowar to Lhasa, where he arrived in March 1716. He had accomplished a journey which ought to make his name for ever famous. It was not till quite 188 years later that the next European expedition—under Captain Rawling and Major Ryder—passed through the valley of the upper Brahmaputra. Father Desideri was the first European who travelled along the whole of the Trans-Himalaya along its southern flank.

For nearly two hundred years nothing was known of that journey except what Desideri imparted to Father Ildebrand Grassi in a letter written in Lhasa on April 10, 1716, which was afterwards printed in the *Lettres Edifiantes*. In some ten others he does not touch on any geographical questions. At last a full and detailed manuscript in his handwriting was found in his native town, and this precious document was published at Rome in 1904. Desideri is the most prominent among the Catholic missionaries who visited Tibet early in the eighteenth century.

He rode for months together past the holy lake and along the Tsangpo valley, always having on the north side rocky buttresses and spurs of the Trans-Himalaya, which looked down into the valley like house gables into an old alley. Nevertheless, Desideri has hardly anything to say about these mountains, but, like Grueber, speaks only of the Langur mountains. When one follows the same route as Desideri it is not hard to understand him. The Langur mountains, which he crossed with much toil, made a deeper impression on him than the Trans-Himalaya, of which he obtained only partial views from the Tsangpo valley. Seen from the comparatively deep trough of this river, the system makes a grand effect only at two places; elsewhere the near-lying mountains which hide the main crest are not very high.

But Desideri is the first European who saw Kailas and has told about it. He relates that he left Gartok in the middle of October, and on November 9 reached the greatest heights he had to surmount on the way to Lhasa. Here, in the province of Ngari, he says, is an extraordinarily high mountain of considerable compass, covered with eternal snow and enveloped in the most terrible cold. Perhaps he wandered round Kailas, for he speaks of the trains of pilgrims and of the religious significance of the mountain.

He knows the various roads from Lhasa to Sining-fu, and he knows that Tibet borders in the east and north-east on China and Tatary, and in the north on wild desolate countries and the kingdom of Yarkand. He tells those who were not to know of his writings till two hundred years later, that Shigatse is the capital of the kingdom of Tsang; that Lhasa, the heart of the central province of Tibet, which is called U, lies among high mountains; and that lofty crests also rise to the north of the Sera monastery.

Desideri's description, however, has never to our minds conveyed the idea of a continuous mountain system along

the way from Ladak to Lhasa. Such an idea existed even in the year 1904 only in theory. In the same year appeared Desideri's description, but it did not enlarge our views or clear up our notions of the mysterious mountains.

But the Langur mountains did make an impression on the father. "They have the peculiarity that every one who crosses them experiences acute discomfort, especially severe headache, nausea and want of breath, accompanied by fever." Desideri has a much more sensible and correct explanation of mountain sickness than Father Huc, who attributes it to poisonous exhalations of carbonic acid rising from the ground. The former says:

> Many people believe that the discomfort one experiences arises from the reek from certain minerals that occur in the interior of the Langur mountains; but, as no unmistakable traces of such minerals have been found hitherto, I rather believe that the unpleasant symptoms are due to the thin sharp air. I am the more inclined to this view, because my pains became still more unendurable when the wind rose, and I suffered from excruciating headache just on the tops of the Langur mountains.

One would have thought that during the long period of nearly four decades, when the Capuchin mission, certainly with some interruptions, was at work in Tibet, quite a literature of the remarkable country would have grown up, for at that time many priests travelled backwards and forwards over the Himalayas. And yet the geographical results are meagre. The most important work of the time is Georgi's *Alphabetum Tibetanum*, for which Orazio della Penna and Cassiano Beligatti supplied almost all the material. Then there is Beligatti's own narrative, which was recently discovered at Macerata in the communal library Mozzi-Borgetti, and was published at Florence in 1902.

Beligatti, born at Macerata in 1708, consecrated his life at seventeen years of age to the service of religion,

and went out in 1738 as a missionary to Tibet, where he remained two years. He returned in 1756 through Nepal and Bengal to Italy, and died in 1785 in his native town.

He made his journey to Tibet in the company of Father della Penna. The Capuchin mission had meanwhile passed the height of its prosperity, and not even the last reinforcement it received from Rome could enable it to maintain the holy fire in opposition to the Dalai Lama and the divine images in the Potala. In April 1745 the flame expired entirely when the last missionaries left Lhasa. Their houses were destroyed, and a hundred years were to elapse before missionaries from Europe—the Lazarists, Huc and Gabet—again penetrated into the holy city. Yet still in the year 1904 the English under Younghusband found a bronze bell in the Potala which had once rung for service in the Capuchin church. "Te Deum laudamus" could be read in the bronze, and the Ambrosian hymn of praise seems to linger in the waves of sound when the bell is set swinging by pagan hands, and the melancholy and victorious echo rebounds from the rocks of Tibet.

Beligatti tells of his long tramp from his native place all the way to Paris, of his taking ship at Lorient for the port of Chandernagore, which he reached half a year later, and whence he and his comrades travelled on in December 1739 to Patna. From here eight brethren and sixteen native servants set out on Shanks's pony to follow the rough paths through Nepal.

As soon as Beligatti in his narrative has passed the Tibetan frontier we read on with redoubled interest, wondering whether he will vouchsafe us a glance at the Trans-Himalaya. But we wait in vain for the rise of the curtain, and freely pardon Fra Cassiano for this omission when we remember that the distant view was perhaps limited by the enveloping draperies of the monsoon clouds.

On the heights of the Langur mountains he cannot refrain, any more than his predecessors, from alluding to

the " singular influence which the mountains exercise over both men and animals, whether this arises from the rarefaction of the atmosphere or from deleterious exhalations." With three saddle-horses, on which the most exhausted of the party rode, the ecclesiastics painfully toiled up the steep mountain flanks. In a shed on the road they, their men and steeds, and some travellers from Lhasa, spent a night which reminded them of " purgatorial fires and hell." Some whimpered, others cried out aloud, while those lying beside them gave themselves up for lost or raved. They could not eat, and their four-legged companions did not contribute to raise their spirits. Next day they crossed the pass, and when they reached Tingri on the other side, all their troubles were over.

He depicts in the same masterly style as Desideri the daily work during his journey, and describes how the camp was pitched and the animals let loose to graze, the camp-fire lighted and food cooked, while some of the brethren read the breviary; how they set out again to make new efforts, scolded refractory mule-drivers, and watched the reddish-yellow swift-footed kiangs which circled round the caravan; how they were troubled by the violent wind which often interfered with their cooking; and how they came to one village after another, and constantly to a new monastery. Beligatti's route may be easily traced on a modern map.

The priests stayed two days in Gyangtse to keep Christmas. Then they went on over the Karo-la to the singular lake Yamdok-tso, with its peninsula and nuns' convents. Next they marched up to the pass Kamba-la, which lies in the range dividing the Yamdok-tso from the Tsangpo. Here, too, nothing is said of the view on the northern horizon, which must have enchanted them. But he, or perhaps Della Penna, who accompanied him on this journey, told Father Georgi what they saw, for the *Alphabetum Tibetanum* draws aside a corner of the curtain, and in the following words: " E vertice Kambalà prospicitur nova

quaedam series elatiorum nivosorumque montium ad Boream. Hinc eos adorant Indi ac Tibetani viatores," or " From the summit of the Kamba-la one perceives a new series of lofty snow-covered mountains to the north. From here Tibetan and Indian travellers worship them (the mountains)."

The snow-covered crests far to the north are the part of the Trans-Himalaya which the Tibetans call Nien-chen-tang-la, and which are holy in their eyes. If the sky were clear, Odorico de Pordenone, Grueber and Dorville, Desideri and Freyre, and all the Capuchins who crossed the Kamba-la, must have beheld the same sight, and yet they have not disclosed anything of the imposing scene displayed before the eyes of the traveller as he looks northwards.

At length they crossed the Tsangpo in the boats of yak hides, which are used at the present day, and on the morning of January 5, 1741, " il Padre Prefetto " (Della Penna) and Father Floriano hurried on to Lhasa to put in order the dwelling in which all were to meet on the following day. Beligatti followed at the head of the rest of the party; he passed the large Brebung monastery on the left, skirted the outer wall of the Potala, and entered the holy city on January 6.

At the end of his narrative Beligatti tells of the handsome monasteries, Sera and Galdan, of the manner in which the missionaries were received by the " King," of their visit to the Chinese Resident, of a Tibetan banquet, of the temple festivals at the New Year, and of the entry of the Grand Lama into Lhasa.

A large part of the original manuscript has been lost, but the portion which has been unearthed from the dusty twilight of the library archives, and has been published 160 years after it was written, throws new light on the life of the Capuchins in Lhasa, and their toilsome journeys over the Langur mountains and the Kamba-la. Thus, then, Fra Cassiano also has at last emerged from the realm of

shadows, and has in the narrative of his journey raised a worthy memorial of his life's work.

From Della Penna's hand there is a description, as excellent as it is short, of Chang-tang, the "Northern Plain," as the Tibetans call the plateau land. It is entitled "Breve Notizia del regno del Tibet." He speaks also of the "Duchy of Dam," lying eight days' journey from Lhasa and two from Nak-chu. There is now no such duchy, but there is a village Dam, and a pass of the same name leads over the Trans-Himalaya south-east of the Tengri-nor.

In a short essay Della Penna devotes a few words to the memory of the famous Dutch traveller Samuel van de Putte, who journeyed between 1723 and 1738 from India through Lhasa to Pekin, and returned to India by the same route. Grueber and Dorville followed nearly the same road as Huc and Gabet were afterwards to try. Van de Putte stayed a long time in Lhasa, and then continued his journey, disguised as a Chinaman, in the train of a Lama embassy to the Son of Heaven. He died at Batavia in 1745. In his will he expressed a wish that all his manuscripts should be burned, for he feared that his short notes written on loose leaves might be wrongly interpreted; they might convey erroneous notions of all the wonders he had seen and experienced, and thus cast a slur on his name.

CHAPTER XIII

THE JESUITS—D'ANVILLE—THE FIRST ENGLISHMEN—RITTER, HUMBOLDT, AND HUC

WHEN the great Emperor Kang Hi (1662–1722) had rounded off the frontiers of his realm by the conquest of Mongolia, Formosa, and Tibet, he decided in the year 1708 to have a map compiled of his immense territories. He entrusted the execution of this work to the learned Jesuits, who sojourned in Pekin and enjoyed his especial favour. At first he confined himself to the countries about the Great Wall, but when the Jesuits, after the lapse of a year, spread out a map 15 feet long before the eyes of the Emperor, he was so delighted that he wanted his whole empire to be surveyed in this manner. The Jesuits began with Manchuria and the province Chi-li, a work which occupied two years. After that not a year passed without one or more provinces being added to the great cartographical work. It reflects great credit on the Chinese that the Jesuits found in every province home-made maps that had been compiled long before. Only Tibet had never been surveyed.

The most prominent of the Jesuits was Father Régis, who lived 36 years in China, and wrote in Du Halde's great work on this country articles on Korea and Tibet. The Emperor Kang Hi sent an embassy to Lhasa to win over the Tibetan princes to the policy of China, and the envoy was also charged with the hopeless task of seeing that a map of all the lands under the rule of the Dalai Lama was compiled.

In the year 1711 this map was delivered to Father Régis,

who found it useless. The Emperor, however, did not give up the scheme. Two Lamaist monks, who had been educated in Pekin, were instructed to survey the mountainous country from Sining to Lhasa and the sources of the Ganges, and to bring to the Son of Heaven revivifying water from that holy stream. In the year 1717 the map was completed and the Emperor sent it to his friends the Jesuits.

After a few slight improvements which were made in consideration of the school from which the two Lamaist topographers came, the sheets of their survey were incorporated in the whole cartographical representation of China, which was laid entire before the Emperor in the year 1718. A copy of this work was sent to the King of France, and from it D'Anville drew his famous map, but he also introduced improvements which were not always successful.

Just at the time when the Lamaist monks were busy at their work war broke out in Tibet, the Dzungarian Khan, Tsagan Araptan, having despatched his commander-in-chief, Seren Donduk, from Khotan to Lhasa with an army. It is a unique record in the annals of warfare that an invading army should march 900 miles through a hostile country for the most part uninhabited and almost everywhere as high as Mont Blanc, and yet be successful. On this campaign the Dzungarians crossed the Kwen-lun, the Karakorum, and the Trans-Himalaya, but of their fortunes we know little or nothing. We know, however, that the country round Lhasa was plundered and devastated, the temples robbed of their immense treasures, and that the enemy put all the lamas that were caught in sacks and carried them off to Tatary. The two lama topographers very nearly fell into their hands. When they heard of the approaching danger they hurried on their work and were solely concerned for their own safety.

The result of their travels was D'Anville's map of the year 1733, which was published in his atlas of China, 1737. We find on it lakes and rivers that are difficult

to identify; we find mountain ranges which run in all directions, but mostly from north-east to south-west, whereas the actual direction is from north-west to south-east. As European geographers had no other map than D'Anville's, they had to be content with his representation. It seemed, however, at least clear that the country north of the Tsangpo was a mountain land, and that from the crests and peaks of those mountains rivers rushed down and discharged into lakes without outlets. For long the influence of D'Anville's map was perceptible in every European atlas. Such is the case with the Tibet sheet in *Stieler's Handatlas* of the year 1875. Later, however, the whole area in which the central part of the Trans-Himalaya lies, having a length of 560 miles and a breadth of 75, was wiped out. Even the Tarok-tso and Tabie-tsaka were sacrificed, two lakes which D'Anville has reproduced very well. But how was one to know what was good and what bad? Everything was doubted. No European had been there. What was old and unreliable was rejected. Even in 1889 Dutreuil de Rhins refrained from inserting any Tibetan ranges on his great map of Central Asia, "car la plupart n'ont pas été même entrevues par les explorateurs modernes." Here there was work enough for the travellers of the new age. A hundred and ninety years after the first Chinese exploration a little order was to be introduced into this labyrinth of mountains.

The deeply indented valleys of the Indo-Chinese rivers have been considered to present the most intricate problems in Asia. And with these must be reckoned the country north of the Tsangpo. Through the efforts of Kang Hi and his friends the Jesuits, an inextricable chaos of peaks and crests began to peep out of the mist in the north. Even to the end of the eighteenth century the geographers of Europe seemed to have placed greater faith in the classical representation than in the Chinese. Afterwards the two changed places, and D'Anville was preferred to Ptolemy. Other sources were wanting, and when Major Rennell says

in the text accompanying his map of Hindustan, published in 1785, that from the top of the Kamba-la " may be seen towards the north a range of still higher mountains covered with snow," we recognize Georgi's statement almost word for word.

When George Bogle left Calcutta in May 1774 as ambassador of the great Governor-General Warren Hastings to the Tashi Lama, he was also enjoined to question the natives about the countries lying between Lhasa and Siberia. In his memorandum to the ambassador Warren Hastings says :

> Tibet is a cold, high, mountainous country. . . . I have been told that a large river forms a boundary between China and Tibet, which was carefully guarded by the troops of both countries ; and that Tibet received European commodities by the valley of Kashmir. But I have learned nothing satisfactory on these subjects. . . . The great rivers of the south and east of Asia appear to issue from its mountains. It is probably, therefore, the highest land in the old continent, and this circumstance, together with the difficulty of access to it, give it a striking analogy to the valley of Quito, in South America.

Warren Hastings had a clearer head than Bogle. The latter travelled to Tibet, crossed the Tsangpo and entered the Shang valley, and repaired to the monastery Namling, where he carried out his mission. But he made no inquiries about the farther course of this road, by which a pundit made his way just a hundred years later up to the Kha-lamba-la pass in the Trans-Himalaya, and which on the northern side runs down to the Tengri-nor. Though he ascended for a considerable distance the Shang valley, one of the southern valleys of the Trans-Himalaya, he has no suspicion of the existence of this gigantic system. And when he describes the character of Tibet in general terms he says only that—

> It is full of hills ; they might be called mountains . . . however, one has few of them to climb, the road leading through the valleys. . . . The country is bare, stony and unsheltered ;

hardly a tree is to be seen, except in the neighbourhood of villages, and even there in no great numbers.

Bogle is the first Englishman and one of the few Europeans who have at any time come into contact with the Trans-Himalaya. Yet he took no notice of it. He cannot be compared with Desideri, Beligatti, and Della Penna.

In 1783–84 Samuel Turner travelled to the ecclesiastical court on a similar errand—to open up commercial relations between Tibet and India—and brought back a fine map of his route, the first existing 120 years later when Younghusband marched to Lhasa. Turner went only to Tashilunpo, and from his windows in the monastery was able to see the roads leading to Bhotan and Bengal, to Ladak and Kashmir, to Nepal, Lhasa, and China. He mentions the road to Sining in a few words which are not at all to be compared with Desideri's clear description of this route. On the Trans-Himalaya he is silent; indeed he could see nothing of its rocky ramparts from his windows in Tashilunpo. But if he had questioned the monks he would at least have learned something of the "nivosi montes" visible "ad Boream," about which Georgi drew information from Capuchin sources.

Equally blind to the mountainous region in the north was the bold but very ignorant Thomas Manning, who tried to reach Lhasa in 1812 on his own account, and succeeded. His report of the journey is marvellous for its emptiness and stupidity. He does not even know the name of Kamba-la. In Lhasa he hears nothing and learns nothing. His path to the mysterious city is like the track of a sailing ship on the sea, where the waves close up again behind the vessel. Younghusband, who followed in the steps of Manning a hundred years later, characterizes it as a meagre description of an important journey.

In the same year William Moorcroft betook himself to Manasarowar, and acquired there valuable information about the holy lake. On his map a range of mountains runs

north of the lake, the Cailas mountains, but they are drawn as if they were the escarpment of a plateau country falling steeply to the basin of the lake. This, then, is the part of the Trans-Himalaya of which Desideri speaks. Desideri was there a hundred years earlier, but his description was not known until a hundred years after Moorcroft's.

During the first decade of the nineteenth century several Englishmen visited Nepal. It would be cruel to expect from them any new information about the mountains to the north. In his excellent work, *An Account of the Kingdom of Nepal* (1811), Kirkpatrick has practically nothing to say about Tibet. But Francis Hamilton allows us to catch at least a glimpse of the Trans-Himalaya, when he says that three ranges start from the Manasarowar, of which the southern two belong to the Himalayas, while the most northern approaches India only near the holy lake, bearing in its central part the peak of Kailas. This was told him by natives of Nepal, who also knew that the most northern range lay to the north of the Indus and Brahmaputra. He has not, however, ventured to extend the chain eastward on his map. He has left it to others to construct at the writing-table a continuous line of mountains up to the Nien-chen-tang-la of the Chinese maps. Of the salt lake, Tabie-tsaka, which had long been known to the Chinese, Hamilton cites a doubtful report:

> Borax and salt are said to be brought from a lake, which is situated nearly north from Kathmandu, about fifteen days' journey beyond the Brahmaputra. They are conveyed to Nepal on the backs of a large kind of sheep, of which many have four horns, and which seem to be the common beasts of burden in all the countries towards the sources of the Indus, Ganges, and Brahmaputra.

Another hundred years passed away. The reign of Ptolemy was over. The Chinese sources were discredited. Europeans tried to draw aside the curtain from the forbidden land themselves. But still the words "terra incognita" stretched across the map to the north of India

and the Himalayas, a country which had remained a closed book during the century.

In the year 1895 Professor Vasilief published in St. Petersburg a description of Tibet, which had been composed by a Mongol named Minkhul Khutukhtu, who died in 1839, after having been employed in the lama temples in Pekin. This author also is indefinite, and states only that to the north of the Himalayas " there is a snow-covered mountain chain, which, as many believe, is identical with the Gandise (Kailas) ; but to me it seems more correct to apply this name as nomen appellativum not only to the Gandise but also to many thousands of other mountains between Kabul and Kam " (eastern Tibet). He mentions also " one of the four stormy snow-covered mountains, the gNyanchen-tan-lkhai-gans-ri," the Nien-chen-tang-la of the Tibetans and Chinese. Minkhul Khutukhtu knew, then, the two end columns in the east and west, between which the mighty wrinkles of the Trans-Himalaya are imprinted on the face of the earth.

A new period in the knowledge and geography of central Asia opens with Karl Ritter. He distinguishes two chains in the interior of Tibet ; the Khor mountains which run from the Kwen-lun across to the Tengri-nor, and the Dsang mountains which skirt the Tsangpo valley on the north, are connected with the "extraordinarily lofty glaciated group Nien-chen-tang-la," and stretch west of the town Tsindo far towards the north-east.

In Ritter's time (1833) no other journeys had been accomplished into the heart of Tibet than those I have just described. His chief sources were therefore Klaproth's translation of Chinese works. Ritter is the first who has in a geographical handbook recognized Chinese learning so far that, relying on it, he has spoken of a continuous chain to the north of the Tsangpo. But he also accepts as trustworthy information certain false statements which may be traced back to mistakes of the lama topographers. According to Ritter the Dsang range is the eastern con-

tinuation of the Gangdisri (Kailas), and the whole system divides Tibet into two halves, the southern being the inhabited Tibet proper, and the northern the land of the Mongolian nomads.

The indistinct notions of the Chinese geographers have accordingly been remodelled and systematized by Ritter. He has made the oriental conception comprehensible and acceptable also to the peoples of the West. But he readily concedes that the knowledge of our Trans-Himalaya, which he calls " the entirely unknown northern range," must at the time be defective.

From the year 1833 we can then start with the fact that the greatest geographer then living was convinced of the existence of a continuous chain to the north of the Tsangpo, though he held it to be quite unknown with the exception of the mountain groups Kailas and Nien-chen-tang-la.

The next man of importance is the great Alexander von Humboldt. He makes four huge mountain waves extend east and west through all the interior of Asia: the Altai, Tian-shan, Kwen-lun, and the Himalayas. Like Ritter, he places the two ranges Khor and Dsang in the high country between the Kwen-lun and the Himalayas, and says of the Dsang that it skirts the long valley of the Tsangpo, and runs from west to east in the direction of the Nien-chen-tang-la, a very high summit between Lhasa and the Tengri-nor.

In all this we recognize Ritter. The two German geographers have made use of the same sources, the statements of the lama topographers and other Chinese works. Many of them were translated by Klaproth, and Ritter and Humboldt drew their information from his work. Humboldt showed (1844) that the Chinese sources were more reliable than the Greek, Roman, Arabian, and Indian. Many circumstances contributed to this result, such as China's wars with peoples on the western boundary of the empire, the great pilgrimages in Buddhistic Asia, the religious reverence with which all lofty mountains were

regarded, and lastly the compass. And yet the conspicuous parallelism which is characteristic of all the ranges of Tibet never struck the Chinese, and consequently Humboldt also was beguiled into assuming a meridional ridge east of Manasarowar, a watershed between the Indus and Sutlej on the north-west and the Tsangpo on the east.

Humboldt considers the mountain skeleton of Asia very simple and regular, and on his map the various systems were drawn with the greatest geometrical preciseness. Instead of the complicated ganglion of the Pamir he has a meridional chain, the Bolor, which long figured on maps of Asia. The Karakorum and the Trans-Himalaya are absent from his review of the great mountain systems, but they are to be found at least in fragments on his map. He has no great faith in D'Anville's representation, and is of opinion that it originated in a time when the most confused notions prevailed about the lofty mountains of Tatary, and it was assumed that they ran off in every direction without any defined order. And yet D'Anville was, on the whole, nearer to the truth than Humboldt.

In order not to lose the red thread in the knowledge of the Trans-Himalaya, we must remember that both Ritter and Humboldt represented the Dzang mountains north of the Tsangpo as one continuous chain. This quite erroneous conception has later been obstinately adhered to, though it is a step backwards compared to D'Anville's idea of southern Tibet.

On my return in the year 1909 I was astonished to find a statement in the *Geographical Journal* that my Trans-Himalaya had been known " for more than half a century." It was affirmed that Brian Hodgson showed it on his map as the Nyenchhen Thangla chain, and added in his text, " separating southern from northern Tibet." The other authorities supposed to have taken part in this discovery are Nain Sing, Ryder, Wood, Rawling, Markham, Saunders, Atkinson, and Burrard.

What, then, I had considered to be one of the most

important discoveries any one could make in Asia had, forsooth, been known in England for more than fifty years.

As far back as the year in which I was born (1865) the great pundit, Nain Sing, travelled up the Tsangpo, and he shows on his map an uninterrupted mountain system up in the north. But of a continuous mountain system on the north side of the river he says not a word, and he has not marked it on his map. Ryder, Rawling, Wood, and Bailey made in 1904, after the march to Lhasa, a brilliant expedition, especially as regards topographical and trigonometrical work. They followed in the footsteps of Nain Sing, and had no opportunity of leaving the Tsangpo valley and making an excursion into the unknown country north of it. As to the other authorities none of them was in Tibet.

The last edition of the sheet Tibet in *Stieler's Hand-atlas*, issued before my last incursion into the forbidden land, shows nothing but a white patch to the north of the Tsangpo, and at the same time only the word "Unexplored" covered this region on the Royal Geographical Society's map of Tibet. And yet the country had been known for more than fifty years! Is it conceivable that the writer of the short notice referred to had sources of knowledge unknown to the Royal Geographical Society, and that the Geographical Institute of Justus Perthes in Gotha, the first in the world, had made the blunder of forgetting the records from which the blanks on the map might have been filled up?

The short notice made a great sensation, and went the round of the world's periodicals, and not least in Sweden, where it appeared in the papers on the day in January on which I reached home. What was the public to believe? Had I gone blindly to work, and had I claimed a priority rightly due to others?

We have followed step by step the explorations on the outer edge of the Trans-Himalaya down to the time of Humboldt, and have thus far found no fixed and certain points but Kailas and the Nien-chen-tang-la. Now we are

on the threshold of the period for which Hodgson has been chosen as the standard-bearer. It will be worth our while to examine closely the sources and the data which have been brought forward as possessing a claim to accuracy. To me this is an affair of honour. I have waited three years, but it takes time to search in the recesses of libraries.

Brian Hodgson was born in the year 1800; he went in 1818 to India, and two years later betook himself to Nepal, where he acted as Vice-Resident from 1825 to 1833 and as Resident from 1833 to 1843. After he had stayed a long time in Darjiling, and had been altogether forty years in India, he returned home and died there in 1894, after a life of constant pioneer work, both as an investigator in humanistic and natural science and as a diplomat and politician.

Two years after Hodgson's death Sir William Hunter published his biography in a volume of nearly four hundred pages. I have read the book through from the first page to the last. It contains lists of innumerable articles and essays on every imaginable subject, which Hodgson scattered in profusion among periodicals in various languages. Yet in this memoir, which gathers together the most minute particulars of a brilliant career, not a word is said of the Nien-chen-tang-la, and not a line is devoted to the mountains north of the Tsangpo.

Well, then, it may be that the biographer has omitted the most important link in an otherwise complete chain. We have therefore no choice but to turn to Hodgson's own writings.

In an article (*Journal of the Asiatic Society of Bengal*, 1853, note on p. 122), the contents of which are chiefly on a linguistic subject, Hodgson says of the Nien-chen-tang-la:

This important feature of the geography of Tibet is indicated by the Nian-tsin-tangla of Ritter's "Hoch Asien" and by the Tanla of Huc. I have, following native authority, used in a

wide sense a name which those writers use in a contracted sense; and reasonably because the extension, continuity and height of the chain are indubitable.

That is all! Not a word on what Ritter twenty years before had stated in a fuller and more systematic manner. For the rest Hodgson speaks only of the property of the chain as a boundary wall between northern and southern Tibet and of the Turkish and Mongolian tribes that are said to dwell on its northern side. Hodgson's entire originality consists in having clothed Ritter's description in other words. His error of bringing into connection Ritter's Nien-chen-tang-la and Huc's Tanla, and combining into one chain two systems running parallel to each other, with an interval of two degrees of latitude, was an exceedingly unfortunate misconception, of which Ritter had already been guilty several years before Huc's journey.

In the year 1856 Hodgson made the conjecture that the Karakorum and the Nien-chen-tang-la belonged to one and the same system. But Humboldt, with whom Hodgson was in correspondence, had expressed the same opinion in 1831. In 1853 Hodgson sees in the Nien-chen-tang-la a worthy rival of the Kwen-lun and the Himalayas, but three years later he adopts Humboldt's four systems, the Altai, Tian-shan, Kwen-lun, and Himalayas, without even mentioning the Nien-chen-tang-la. The statement that this chain divides northern from southern Tibet is borrowed entirely from Ritter.

Hodgson published in 1857 a map which is from first to last a fanciful representation in everything connected with the mountains north of the Tsangpo. D'Anville had given us 124 years before from Chinese sources a cartographical picture in which, as far as was possible, he endeavoured to follow the actual contours, and in which some details were strikingly accurate, especially the country round the Manasarowar. But Hodgson spoiled everything, both what was correct and what was defective.

Here we have to do with a retrograde step in our knowledge of those mysterious mountains. The little that was known in the 'fifties of the nineteenth century of the Trans-Himalaya, and which for the most part bore the label "made in Germany," Hodgson distorted, explained incorrectly, and imported into England. If he had only taken the trouble to cast a glance at Stülpnagel's map of India and Tibet in *Stieler's Handatlas* of the year 1849, he would there have found a representation of Tibet which contrasts as advantageously with his own as D'Anville's map with that of Ptolemy.

The process was as follows: Klaproth translated the Chinese authors, and his writings were quoted by Ritter and Humboldt. Both these German authors were consulted by Hodgson, but he filled in the space at his writing-table out of his own head. It is easy to set down a range of mountains on the blank space of a map theoretically and without a shadow of proof, if one is convinced of its existence. But no one has the right to appeal to the result of such a process as to a gospel and a dogma, and least of all at a time when it has at last been proved that such a mountain chain does not exist, and when the central Trans-Himalaya has been resolved into a labyrinth of different ranges.

This is how the matter stands with regard to the statement that Hodgson knew these mountains more than fifty years before my journey.

On their famous journey in 1845–46 from Manchuria to Lhasa, the two Lazarists, Huc and Gabet, crossed the whole of eastern Tibet, and in so doing passed over the eastern part of the Trans-Himalaya. Near Kuku-nor they with several Mongolian caravans joined themselves to a Tibetan embassy which was on its way home. The whole company numbered 2000 Tibetans and Tatars; all the horsemen were armed and 500 Chinese soldiers escorted the embassy to the Tibetan frontier; 15,000 yaks and 1200 camels carried the baggage, and 1200 horses bore riders. In his

admirable description of the journey Huc exclaims: "How astonished these endless silent deserts must be when they are so suddenly surprised by such a great tumultuous party!"

Kuku-nor was left behind and the travellers came up to the highlands of Tibet where difficulties soon accumulated in their way.

The deserts of Tibet are certainly the most dreadful country conceivable. The ground seems to rise continuously, the vegetation grows poorer the farther we advance, and the temperature falls alarmingly. Now death, too, began to lie in wait for our poor caravan. Want of water and fodder soon exhausted the strength of the animals. Beasts of burden had to be left behind daily, for they could drag themselves along no farther. Afterwards came the men's turn.

On the stupendous heights to the south of the Muruiussou or upper Yang-tse-kiang, horses, mules, and camels died in shoals, and forty men had to be left behind. Father Gabet was then attacked by an illness which put an end to his life before he could return to France.

Then we began to ascend the huge chain of the Tanla mountains. After six days' climbing over the slopes of mountains lying as in an amphitheatre behind and above one another, we reached at last that famous plateau which is perhaps the highest country in the world. From the margin of the grand plateau we perceived at our feet peaks and summits which surmounted various gigantic mountain groups, their farthest offshoots extending to the horizon.

Nakchu on the Salwin was the first Tibetan village. There were black Tibetan tents as well as Mongolian kibitkas. We are now approaching the eastern wing of the Trans-Himalaya, and wait with eagerness to learn what an educated European, who travelled right across the system, has to relate about it; he must surely have something to say. Yet Huc hardly mentions those mountains, and we have only an inkling of their presence in the

following sentence: "The road leading from Nakchu to Lhasa is in general stony and very troublesome, and when the range of the Koïran mountains is reached, it is very trying." These Koïran mountains are the eastern continuation of the Nien-chen-tang-la, and therefore a part of the Trans-Himalaya; apparently they made no very deep impression on Father Huc.

Soon the road becomes better, villages and fields occur more frequently, and after a last tiring pass the two Lazarists enter the city of the Dalai Lama on January 29, 1846. Huc is one of the most brilliant and sympathetic personalities that have ever written their name on the brow of Asia.

CHAPTER XIV

THE TRANS-HIMALAYA FROM THE MIDDLE OF THE NINETEENTH CENTURY UP TO THE PRESENT

In the middle of last century three famous English doctors—Hooker, Thomson, and Campbell—contributed in a meritorious manner to extend in Europe the knowledge of the Himalayas, their geology and natural characteristics. They did not extend their theories beyond their own range of vision, and carefully abstained from building up mountain ranges which would perhaps in a few years have fallen to pieces.

Sir Joseph Hooker (1848–50) saw from the pass Donkia-la, which forms the boundary between Sikkim and Tibet, on the farthest horizon to the north-west and north of Nepal, "some immense snowy mountains, reduced to mere specks on the horizon," and adds that snow-topped range rose over range in the clear purple distance. He was convinced that they lay beyond the Tsangpo in the country of the salt lakes, where the most conspicuous characteristic features were the immense heights and the colours which contrasted sharply with the dark, snow-clad rocks of the Himalayas. The distance to these mountains seemed to him enormous. Previously he had looked upon Tibet as a flat country falling in sloping steppes gently to the Tsangpo valley. It is difficult to make out from Hooker's description which mountains he meant, but in his remarks about the view from the Donkia-la we seem to catch a glimpse of the Trans-Himalaya, and to find a suggestion of a world of unknown mountains—"nova quaedam series elatiorum nivosorumque montium ad Boream."

Hooker looks upon the highlands round the Manasarowar as an important centre from which four mountain ranges diverge—the eastern Himalayas, the north-western Himalayas, the Kwen-lun, and "the chain north of the Yaru (Tsangpo) of which nothing is known."

Hooker published his *Himalayan Journals* in the year 1854. The year before appeared the article in which Hodgson mentioned the Nien-chen-tang-la. If Hodgson had really known these mountains, Hooker would not have described the country north of the river as a terra incognita, and he would have been less likely to do so, because the two explorers were personal friends and were in the forefront of the progress of their time, especially in their knowledge of the Himalayas.

Sir Alexander Cunningham introduced the name Trans-Himalaya in the year 1854, giving it to the range which separates the upper Sutlej from the Indus. But as this range is part of the Himalayas proper the name soon disappeared from geographical literature. For the mountains north of the Manasarowar he proposed the name Kailas or Gangri range, which was retained for a long time after. But about the direction of the range, or even of its prolongation beyond the Kailas mountain, Cunningham does not say a word, or even make a guess about it.

In the year 1865 occurred Nain Sing's famous journey. He belonged to Captain Montgomerie's school of topographers, which was composed of experienced pundits or educated Hindus and natives from the upper valleys of the Himalayas. Montgomerie drew up the plan for Nain Sing's journey of discovery, and provided his protégé with a sextant, a compass, a chronometer, thermometers, and other instruments. The pundit travelled on foot and took with him a prayer-mill and a rosary. In the former he kept thin strips of paper on which he noted down his observations, and he let a bead of the latter pass through his fingers every hundred paces, reckoning in this way the distance he had traversed.

Nain Sing started from Khatmandu. We cannot follow him step by step. He visited Lhasa, passed up the Tsangpo valley to the Manasarowar, and returned to British India after a six months' journey. Montgomerie worked out Nain Sing's results and expressed his disappointment that it was so difficult to gather an idea of the country from the pundit's description.

Between Manasarowar and Tradum, Nain Sing saw no important heights. A little farther east the mountains were even fairly low. Still farther east, however, appeared to the north a very high snowy range which ran parallel to the Tsangpo for 20 miles. From the Kamba-la, where the Capuchins caught sight of lofty snow mountains, the pundit saw only comparatively low elevations.

Any one who has passed through the Tsangpo valley will understand the pundit's impressions. Except Desideri, only five Europeans have seen this country, and of these four belonged to the same party, namely, those under the leadership of Captain Rawling. I followed in their track three years later. Crests and ramifications lying close at hand shut out the view towards the north. Where Nain Sing could see no heights of importance to the north, I crossed a range by the Ding-la, a pass not less than 19,308 feet high. Such secrets are not to be discovered from the Tsangpo valley, for the southernmost offshoots are as little transparent as other mountains. It is not enough to look at the margin of an unknown country; if we would know what is hidden in the interior, we must cross it along several lines. There, a little farther to the east, where the height of the mountains seemed to Nain Sing to diminish still more, are hidden to the north the mighty central ranges of the Trans-Himalaya, the Lunpo-gangri, the Lunkar, the Lapchung, and the Kanchung-gangri. Of the lofty snowy range the pundit mentions I have seen only the western part which belongs to the Kanchung-gangri. Nain Sing travelled a distance of 400 miles between Shigatse and the Marium-la, of which only 90 were immediately along

the north bank of the river. The journey of the pundit revealed nothing of a continuous mountain system, nay, nothing of an unbroken range, and could not reveal anything of it. Montgomerie has no suspicion of its existence, at any rate he does not mention it. He does not refer to Hodgson's hypothetical range, and makes no allusion to the Nien-chen-tang-la. Only on the map to Nain Sing's narrative one notices mountains skirting the river which might, however, very well be the outer edge of a plateau. In this respect D'Anville gives us more. We are not content with the peripheral parts of this terra incognita so difficult to conquer; we must force the outer works and penetrate into the interior.

Pundits effected such an incursion to the north in the year 1867 on their journey to Tok-jalung. As usual the plan was made by the indefatigable Montgomerie. The Aling-gangri was discovered, a snow-clad mountain group, the relation of which to the Trans-Himalaya has not yet been ascertained. On this journey one of the pundits approached the source of the Indus within five days' journey, but was driven back by robbers. Thus the discovery of the Singi-kabab, the source of the Indus, was postponed for forty years, and fell to my lot.

In 1868 those regions were again visited by pundits. They heard of Selipuk and the Nganglaring-tso, and I subsequently confirmed their existence by visiting those places.

In connection with the discoveries of the pundits in western Tibet, Sir Henry Rawlinson expressed the view that if a traveller were once over the Indus and the inner northern range, he would find himself up on the plateau of Tatary, and could drive with horse and carriage to the great desert without crossing a single pass. In a carriage over the Karakorum, the Arka-Tag, and the Kwen-lun, where one may thank God if one gets over safely on horseback! So little was known forty years ago of the highest mountain land in the world. It is amusing to read how the great geographers of that time argued for or against

the existence of those mountains. As a rule they only "believed" that the configuration was so or so, but why, no one knew. Rawlinson only believed that a man could drive to Eastern Turkestan. And yet it became evident to Strahlenberg during his long sojourn in Siberia after the wars of Charles XII., that Eastern Turkestan must be bounded on the south by mighty mountains.

One of Montgomerie's natives accomplished an important journey in 1871–72, passing up the Shang valley to Namling, as Bogle had done a hundred years before. He was not content, like Bogle, with the Namling monastery, but continued his journey northwards, and crossed the Kalamba-la pass to the "great heavenly lake," the Tengri-nor. This route was to serve for thirty-five years as the eastern boundary of the land which still remained unknown when I started on my last journey.

The traveller could see from a monastery by the lake a number of fine grand snow peaks which are called the Ninjinthangla. The lamas said that the highest peak was a god, and that three hundred and sixty smaller snow peaks surround it which serve as his suite. From the lake shore all these peaks presented an imposing appearance. This was the first time that a trustworthy traveller confirmed the existence of the famous Nien-chen-tang-la, which the Capuchins had seen raising its sun-bathed bonnets of snow above a petrified sea of bare many-coloured rocks.

On his return the traveller crossed the Trans-Himalaya a second time by the pass Dam-largen-la, and in the village of Dam recalled to memory Della Penna's duchy of the same name.

Montgomerie was justly proud of the harvest thus gathered in, and wrote in 1875 that he had tried from time to time to obtain enlightenment about the unknown country to the north of the river by means of the men he sent out. But even then he did not speak of a continuous chain. Only the Nien-chen-tang-la was known through the crossing

of the Kalamba-la and the Dam-largen-la. Westwards the land was still terra incognita. Montgomerie did not suspect that this alluring inscription would stand for thirty-one years more on English maps.

The great Nain Sing set out again in 1873, this time from Leh to Lhasa, and at the instance of Captain Trotter. This journey is one of the most brilliant ever achieved in Tibet. He found the Targot Lha, my Targo-gangri, which had already appeared on D'Anville's map, discovered a range which runs thence for 180 miles eastwards, and fixed a number of its summits. He saw the Targo-gangri only from a distance of 100 miles and the range from 60 miles. Much that he says is therefore incorrect, and, what is worse, he inserted farther south, from mere rumours, large rivers which figured for thirty years on all maps of Tibet, until I was able to remove these imaginary streams from the earth for ever.

After Nain Sing had discovered a series of large lakes he proceeded lastly over the Dam-largen-la to Lhasa, and when he returned to Calcutta he had executed a survey of 1200 miles of unknown country.

During their journeys from 1865 to 1875 the pundits crossed four passes of the Trans-Himalaya, two in the west and two in the east. They defined by their routes the limits of the unknown mountain country, which, as late as 1906, was marked on all maps by blank spaces with the inscription " Unexplored."

The story of the Himalayas goes farther back; it begins in the mythical obscurity of the Indian hymns, and the outlines of these mountains stand out clearly in classical literature. The Chinese knew the Kwen-lun from remote times, and it is on European maps of the beginning of the eighteenth century, though in rough outlines and only partially. But the Trans-Himalaya! How hopeless has the contest been against its giants! Heated controversies have often been carried on by learned men on the structure of the Himalayas, on the architecture of the Kwen-lun and

the Karakorum. But no sound has disturbed the crests of the Trans-Himalaya, the silence of ignorance has reigned on its heights, an eloquent, unbroken, and solemn silence. The country was unknown. While waiting for exact information first hand, men took the side of D'Anville or Klaproth. Students at home could draw mighty ranges across the blank spaces of the map at their own will and pleasure without criticism having a word to say against them. Not till the years 1906–8, when the central ranges had been discovered, did a slight dispute arise. This is always the way of the world. Imagination is tolerated, but the truth is rejected.

For a long period of years Henry Strachey was the chief authority on the geography of Tibet. On his important journey in 1846 to the Manasarowar he saw from the Himalayan pass Lankpya Dhura, " through the opening northwards, a glimpse of distant blue mountains, part of the Gangri range, perhaps, on the north side of the Sutlej." On his way to the lake he made the following observation :

> The north-west horizon is bounded by the Gangri range of mountains moderately tipped with snow, and remarkable for the deep purple-blue colour of their inferior rocky parts ; and about the middle of this range rises the snow-capped Peak of Kailas, somewhat higher than the rest of the line. I do not believe these mountains are nearly so lofty as the main ranges of the Indian Himalaya.

He takes the Marium-la for the eastern boundary pillar of the Gangri range, and does not believe in the existence of any ranges north of the Tsangpo ; for beyond the Marium-la " eastward, extends table-land with smaller, more irregular and detached hills, all the way to Lhassa, and as far as my informant knows to the northward." At that time, then, some believed in the existence of a huge range, others in a flat plateau studded with scattered hills.

The brothers Schlagintweit, the first Europeans who

crossed the whole great upheaval of Tibet between India and Eastern Turkestan, knew of three systems, the Himalayas, Karakorum, and Kwen-lun. They regarded the Karakorum as the backbone of inner Asia, which was prolonged westwards by the Hindu-kush and branched out in the east—How could they know this, as no one had been there? Tibet is a valley bordered by the Karakorum and the Himalayas. This view Hermann von Schlagintweit did not alter even after Nain Sing's first journey, which shows that he did not at all receive the impression from the pundit's description that there was another range bordering the Tsangpo valley on the north. But the existence of the Nien-chen-tang-la could not be overlooked, so this range was simply connected with the southern branch of the Karakorum, and thus came into existence a monstrous bastard between two different ranges.

In his book *Indische Altertumskunde*, which appeared in 1867, Christian Lassen has attempted to draw the main lines of the mountain skeleton of Asia according to the knowledge of his time. He conceives the Kailâsa or the Gangdisri range, the western wing of the Trans-Himalaya, to be a ramification of the Karakorum, which is itself an offshoot from the Kwen-lun. In the Kailas peak the Gangdisri range comes into contact with the Himalayas, without, however, belonging to them. Lassen therefore builds a bridge of mountains from the Pamir to the Himalayas, and with all his diligence cannot ascertain that the various ranges belong to different systems and are parallel folds of the earth's crust.

The noted geographers Sir Clements Markham and Trelawney Saunders discussed in the middle of the 'seventies of the nineteenth century the structure of the Himalayas, and at the same time alluded to its connection with the mountains in the north. Markham distinguishes three ranges—the southern, which bears the great peaks of the Himalayas; the middle, which is the watershed between the Ganges and Brahmaputra; and the northern, which is

a prolongation of the Karakorum. He therefore includes the Trans-Himalaya, so far as it was known, in the system of the Himalayas and calls it the "northern range." He places on its southern flanks the sources of the Indus, Brahmaputra, and Sutlej. I have succeeded in proving that the Sutlej and Brahmaputra rise on the northern flank of the Himalayas, and that the source of the Indus lies to the north of the western Trans-Himalaya, though all three rivers receive large affluents from other directions.

Saunders considers the Kwen-lun to be the northern boundary of the Tibetan highlands and says:

> But all detailed knowledge of the interior of this extraordinary country is wanting, and it must continue a sealed book to Europeans until friendly pressure is put upon the Government of Peking to allow European intercourse between India and the Chinese dominions.

Several leaves of this sealed book belong to the chapter Trans-Himalaya.

Saunders' text is not quite clear. At one time he says: "The mountains on the north of the Sanpu are the contreforts, buttresses, slopes or escarpments of the table-land which they support," and at another time declares that "the Gangri Range is only known at its extremities." The last affirmation was correct and remained so for thirty years. In September I telegraphed to the reporter of the *Times* at Simla: "The eastern and western parts of the Trans-Himalaya were already known, but its middle and highest part lies in Bongba and was unexplored." Saunders maintains that a mountain system must be crossed before it can be said to be known, and he points out that these mountains had never been crossed along a single line between the Manasarowar and the Tengri-nor. He repeats Ritter's mistake of making the Nien-chen-tang-la continue northwards and merge into the Tanla of Father Huc.

On the other hand Saunders does not hesitate a moment to insert Hodgson's hypothetical range on his

map, which he endeavours to fit in as well as he can with some of D'Anville's lakes and rivers. The result has a certain appearance of probability but no resemblance to the truth. How little was known of these mountains is proved by the fact that Saunders, in the year 1877, drew a single continuous range to the north of the river, while Richthofen in the same year—in his famous work *China*—set down four parallel ranges in the west, two and three in the middle, and one in the east. Both were equally wrong; it could not be otherwise. Neither had been there, and each could design his map in the manner which seemed to him most probable.

In his work *The Himalayan Districts of the North-Western Provinces of India* (1882), E. T. Atkinson mentions cursorily a range of high peaks north of the river, but he adds that it is impossible to give a general description of the Tibetan highlands based on actual observation. But from the little that is known, he thinks it may be assumed that Tibet is crossed by lofty mountains, and it seems to him certain that the Kwen-lun and the Himalayas are the northern and southern margins of the country. The map which Atkinson published in his book is a copy of Saunders' map, but yet Atkinson is referred to as an authority on the Trans-Himalaya. He could, of course, have read in books what had been achieved in the western and eastern parts, but of the main mass, the central regions, he had not, and could not have, the slightest smattering of knowledge.

In the same year, 1882, Elisée Réclus issued the seventh volume of his admirable *Nouvelle Géographie Universelle*, wherein he suggests the name Trans-Himalaya for the northernmost range of the Himalayas which runs immediately beside the Tsangpo on the south. Cunningham had confined this name to a range in the west. Of our more northern mountains Réclus says: "On the north of the depression, in which the Tsangpo flows, is the Tibetan plateau, carved by running water into innumerable valleys."

He assumes, however, like the Englishmen, the existence of a great range, the Gang-dis-ri north of the Tsangpo, and makes it join the Nien-chen-tang-la in the east.

About the year 1896 Richthofen wrote the Tibetan chapter of the third volume of his work *China*, which was only published a short time ago by Dr. Ernst Tiessen, seven years after the death of the Professor. Richthofen there collected all the notices that exist on the mountains of Tibet, and came to the conclusion that a very lofty range, already indicated by D'Anville, rises to the south of the Tengri-nor, which abounds in glaciers and rocky pinnacles, and extends from west-south-west to east-north-east, and forms the watershed between the Tengri-nor and the Ki-chu, the river of Lhasa. Westwards this range takes a more westerly direction, and from its southern flank the water flows down to the Tsangpo. He seeks in vain to obtain an idea of the geographical configuration of the country from the maps of Nain Sing, Bower, and Littledale—from them such a " scheme is not to be drawn." But here he refers to the country north of the Trans-Himalaya. If countries which had been traversed by three travellers still remained obscure, what could be expected of those in which no one had been ? There the imaginary continuous chain, called sometimes Nien-chen-tang-la, sometimes Gangri, Gang-dis-ri, or Kailas, had been so firmly fixed in the minds of many that even Richthofen believed in its existence.

But if we search through writings and examine records with the microscope of criticism, we look in vain for information about the proper central Trans-Himalaya. In past years we find not a line, not a single word about it. We come always upon Kailas and the Gangri mountains in the west and the Nien-chen-tang-la in the east. There Europeans and Asiatics have been. But if one inquires about the range supposed to stretch like a bridge from the one terminal pillar to the other, it turns out on close examination that it has been constructed in Europe or

India, but has never been explored on the spot. It was a creation of the imagination; its days were numbered, and when the time came it was found to have no claim to existence.

When we now turn to the three European expeditions which have come into contact with the Trans-Himalaya in our own days, we find that they have all travelled to the range and summits which have for ages been known by the name Nien-chen-tang-la. They have confirmed the existence of those mountains, but have thrown no new light on our system.

Gabriel Bonvalot, accompanied by Prince Henry of Orleans, accomplished in 1889 that remarkable journey on which he traversed the whole of eastern Tibet and reached the northern foot of the eastern Trans-Himalaya. Coming from the north, Bonvalot approached Tengri-nor full of expectation. At last the path led up the last elevation which intercepted the view towards the south.

> As we come to the top of the pass we catch sight of the Ningling Tanla and the eastern edge of the lake. Hastening our steps, we climb the neighbouring heights to enlarge our horizon. . . . The Ningling Tanla holds our eyes the longest. This range stretches just in front of us its snow-besprinkled crest and quite closes in our view. The height and regularity of this line of grand summits is astonishing; they rise above spurs which descend to the lake, drawn up in rank like the tents of a military camp. And the whole is dominated by four lofty and majestic peaks of ice, which the Tibetans worship, for behind them lies Lhasa, the spiritual city. Turning our eyes to the northern shore of the lake we perceive no snow on the small ridge which skirts it, while the flanks of the Ningling Tanla are white, and the truth of the Tibetan saying is evident: "The water of the Namtso is formed from the snow of the Ningling Tanla."

It was not written in the stars that the noted French expedition should cross the Trans-Himalaya and penetrate into the forbidden land behind the high snow mountains.

But Bonvalot did ascend the Dam pass, where Nain Sing had tried his luck.

Immediately to the south of the Ningling Tanla appears on Bonvalot's map a second and higher range with the text: "Sommets très élevés (dominant la chaîne)," a feature in the sculpture not to be found in any other map. Even here in the part of the system best known at that time the data are extremely contradictory.

Four years later another French expedition beheld the heavenly lake, that of Dutreuil de Rhins and Grenard, who writes:

> On November 30 we discovered, from the top of the last ridge, the lake of heaven, which is honoured as sacred and divine, its dark calm blue contrasting strongly with the blinding white of the mountains with their thousand peaks, which rise from the southern shore and resemble the waves of a stormy sea.

The expedition was stopped by the Tibetans, and fifty days were wasted in useless negotiations. After a short visit to the foot of the Dam pass, the Frenchmen had to draw off north-westwards, where a sad fate was to befall Dutreuil de Rhins, who fell a victim to Tibetan bullets.

The explorer St. George Littledale was more fortunate when he came to the lake of spirits from the north in 1895. Like his predecessors, he was struck by the magnificent view.

> On the south it (the lake) was fringed by the magnificent range of the Ninchen-Tangla—a succession of snow-clad peaks and glaciers, partially hidden in clouds and vapour, which added to their size and grandeur, while above all towered with cliffs of appalling steepness the great peak of Charemaru, 24,153 feet.

In this name we recognize D'Anville's "Tchimonran." Littledale's route passed over the pass Goring-la. Since the time of Father Huc no European had succeeded in crossing the eastern Trans-Himalaya.

A new point of departure was marked in the year 1904 by the journey of the four officers, Ryder, Rawling, Wood, and Bailey, after the English expedition to Lhasa, when they travelled on the track of Nain Sing up the Tsangpo. The chief result of this journey is the exact survey of the valley and the triangulation which connected all visible summits. Ryder described this journey to the Royal Geographical Society in London. He certainly mentions a snowy range with summits attaining to a height of 23,200 feet which was visible from the hills lying north of Tradum. But neither he nor Rawling in his book on the journey says a word about any continuous mountain system; rather he discountenances the view that such exists, and we find none shown on his map. There it seems as though there were the margin of a plateau country bearing scattered summits. It was not until I had in India an opportunity of imparting my results to Major Ryder that he readily admitted that "a lofty complicated mountain system" runs north of the Tsangpo parallel to the Himalayas.

Now the last visitor to the Trans-Himalaya before my journey remains to be mentioned. In the year 1905 Count de Lesdain came down from the north, and at the sight of the heavenly lake and the peaks rising to the sky, exclaimed:

> Towards evening on September 13 we discovered the Tengri-nor, which stretched out majestically in front of us. It is impossible to conceive a more beautiful and grander spectacle. Beyond its broad deep-blue mirror appeared the huge chain Nien-chen-tang-la, covered with eternal ice. The highest points were reflected in the calm transparent water of the lake. These stupendous heights form a more glorious frame than any of the Swiss lakes can boast of.

That is all! We can only conclude from his small sketch-map that he crossed the Trans-Himalaya by the Kalamba-la, and therefore by the route already known since 1872 from the journeys of the pundits. He says nothing of a connected system.

It seems as though a magic charm hovered round the summits of the Nien-chen-tang-la. They rise like the points of a kingly crown high above the earth, higher than any other part of the Trans-Himalaya. Thus they looked for endless ages on the nomads before northern Buddhism had penetrated into Tibet; thus they looked down on the Chinese who collected the first notices of the holy land; they excited the admiration of the Capuchins as a line "nivosorum montium ad Boream"; they cast a pale reflexion of the abode of eternal snow into the study where the learned Klaproth dived into the annals of the Chinese; and they illumined the now faded leaves stored in German archives, to which the old masters Ritter and Humboldt confided their thoughts. They excited the astonishment of the intrepid pundits, who brought the first certain information to Europe, shone like beacons before the three French expeditions, which approached them from the north, and even roused the quiet, imperturbable Littledale to a burst of enthusiasm.

But the threads that have been spun round those giants are few, and these few are weak. We know hardly anything of those mountains. Rhapsodies, full of poetic expressions, that is really all. There are glaciers and firn-fields, which are reflected in the azure-blue lake, giddy heights, and restricted horizons. But what else? Photographs and maps there are none, and not a single rock specimen has been taken from the lap of the mountains. And the passes to the east and west, the Dam-largen-la, the Kalamba-la, and the Goring-la! We must be thankful that we at least have learned their names and heights.

The Nien-chen-tang-la is like a Catholic cathedral in which a funeral mass is always being celebrated. One approaches it in reverent silence. One is overwhelmed by what one sees and is struck dumb. No one has succeeded in breaking through the charm. Round the Nien-chen-tang-la it is always peaceful. And before one is aware the

hymns have died away and one is again led out to the black tents of the Tibetans.

And yet the Nien-chen-tang-la is a part of the Trans-Himalaya. Six expeditions had visited it, four of which had crossed the system. To the west of it no one had been.

We owe the last theoretical representation of the Trans-Himalaya to the map of Colonel S. G. Burrard in the first part of his book *A Sketch of the Geography and Geology of the Himalaya Mountains and Tibet*, which appeared in the year 1907, that is, about the time when I had made three of my eight crossings of the mountains. On this map, too, a range runs on the north of the upper Indus and the Tsangpo. In its western part it is called the Kailas range, in its eastern the Nien-chen-tang-la range. It forks, however, on the 85th meridian of east longitude; the eastern arm lies between the Raga-tsangpo and the Tsangpo. Farther to the east the northern arm splits up again twice. Such conclusions might be drawn from the material then available, but as regards the central Trans-Himalaya they had nothing to do with the reality.

After Littledale's lecture to the London Geographical Society in 1896, the President of the Society, Sir Clements Markham, rose and said:

> I will say a few words respecting the chain of mountains which Mr. Littledale actually crossed and which he mentions as throwing up peaks 20,000 feet high. . . . These mountains are of the greatest possible importance and interest; they have only been crossed by native explorers and by Mr. Littledale opposite the Tengri-nor, and in the whole length from Tengri-nor to the Marium-la no one has crossed them, so far as we know. One of the last suggestions by General Walker was that a rough survey should be undertaken of these northern parts of the Himalayan system, and I believe nothing in Asia is of greater geographical importance than the exploration of this range of mountains.

In the same year Sir Clements Markham remarked in a presidential address to the Society:

It is to the desirability of completing the exploration of this mighty range that I am anxious to turn the attention of geographers. . . . But I think that it is to the mountains which form its southern buttressing wall, and which rise from the valley of the Tsanpu or Brahmaputra, that the efforts of explorers should now be directed. . . . It appears to be a magnificent range of mountains.

He goes on to speak of the work of the pundits and of Littledale, and resumes:

This I believe to be the whole of the knowledge we now possess of this most interesting range of mountains. . . . The portion of this northern Himalayan chain from Kailas to the Goring-la of Littledale, a distance of 600 miles, requires to be explored. . . . A more accurate knowledge of its configuration is a great geographical desideratum. . . . Here, then, is a piece of work which is well calculated to arouse the ambition of future explorers.

In another presidential address in 1899 Markham repeats:

One of the most interesting pieces of geographical work that remains to be achieved in Central Asia is the detailed examination of the great chain of mountains bounding the Tsanpu valley on the north.

Again in the year 1904 Markham complains:

In my address of 1896 I drew attention to the importance of exploring the great northern range of the Himalaya from Kailas to the Goring-la of Littledale, and I got together all available information on the subject. But this is a work which still remains to be done.

In the autumn of 1905 I wrote the last chapters of my book, *Scientific Results of a Journey in Central Asia, 1899–1902*, concluding with the following words:

The extreme south of Tibet, the Tsangpo valley, has recently been investigated by members of the English expedition (Ryder and Rawling); but all the wide region between this part and

my route to Ladak (1901) is an absolute terra incognita. The explorer who tries to give an account of the general features of the Tibetan highlands will in this gap never fail to lose himself in guesses and theories without an atom of foundation. Rather than expose myself to such a risk I have determined to explore the unknown country myself, and see it with my own eyes. Then only, when the gap has been filled up and the blank spaces on our maps have given place to new lakes, rivers and ranges, will it be possible to give a correct picture of the morphology of the Tibetan highlands. . . . Therefore I prefer to postpone a general description of the country until my return from the journey on which I am about to start. The work which I hope then to write must be considered an immediate continuation and completion of this which I have now brought to an end.

I therefore started with a definite object. The aim of my journey was to fill up the huge area of the middle Trans-Himalaya. How far I succeeded in carrying out my plans is related in this book. The Trans-Himalaya was crossed along seven independent lines, the outlines of its configuration were laid down on a map, and I proved that the whole was a connected system, the greatest, indeed, in the world. Instead of the single stereotyped range which had been conceived in European studies, I found a labyrinth of lofty ranges, and by this discovery wiped out for ever the "Unexplored" which appeared on English maps in the region north of the Tsangpo.

After my lecture in London on February 23, 1909, a communication from Sir Clements Markham was read in which he said:

The so-called Nien-chen-tang-la mountains were unknown from the Tengri-nor to the Maryum-la pass, and I always looked upon their discovery, on those meridians, as the most important desideratum in Asiatic geography for many reasons.

And he expressed his pleasure that the wished-for discovery had been at last achieved

What was known of the geology of the Trans-Himalaya before 1906? The extreme tip of its western wing was known where it touches British territory, and Stoliczka was the first who tried some forty years ago to introduce order into the confused chaos. In the east a line had been determined, the road from Sikkim through Gyangtse to Lhasa. The Director of the Geological Survey of India, Dr. H. H. Hayden, who took part in Younghusband's expedition, has given us geological maps and detailed descriptions of the structure of that region.

But of the central part nothing was known. The side of the moon turned towards the earth was better known as regards its orography than the inner parts of the middle Trans-Himalaya, so what could be expected of its geological structure? A single continuous chain had been drawn theoretically on the north of the Tsangpo. As the river received large tributaries from the north it was safe to assume the existence of high mountains in their source regions. But there was no foundation for geological hypotheses. There was only one resource for any one who wished enlightenment on the subject—let the mountains speak for themselves.

At all the places where my route came in contact with rocks *in situ* I took rock specimens, and there also I always determined the strike and dip of the strata. On the other hand, where rock *in situ* did not crop out, or could not be reached, rock specimens were collected from the weathered ruins of former mountains. It often happened that to spare my horse and my own heart, I rode past a cliff rising too high. Therefore in my series of 1170 specimens many gaps occur, which might easily have been filled up in a country in which one has not constantly to fight against the deadly rarefaction of the air. To put it plainly, there is often the painful choice of killing one's horse or completing the collection of specimens. And as a journey in Tibet depends almost entirely on the endurance of the caravan, the collection must often suffer.

But every rock specimen from a hitherto unknown country is a gain, and an undoubtedly extensive selection of such specimens from one of the mightiest mountain systems of the world must throw a clear light on the fundamental outlines of its architecture. I am therefore convinced that the stones which I knocked out of the rocks of the Trans-Himalaya during my toilsome wanderings will give us at least a provisional insight into the geological structure of the system, when they have been examined under the microscope of an expert, compared together, and exhibited on a map in cross sections with different colours. They will give us some notion of the forces which were active in the earth's crust when the brow of Asia was first wrinkled by the folded ranges of the Trans-Himalaya, when its crests were thrust upwards, and its towering peaks lifted their icy battlements towards the sun.

After my return the geological material was entrusted to Professor Anders Hennig of Lund. With unremitting care and constantly growing interest he has plunged into my collections, let the stones speak in their silent language, and drawn out the secrets concealed in the form of crystals. They have been like Tibetan bells, the metal of which has been first made sonorous in Sweden. Every stone is to me a souvenir of a pass, a camp, or a windy day—a microscopical fragment of my own Trans-Himalaya. And Professor Hennig has received them with the same reverence with which I entrusted them to him.

I perceive the defectiveness of my own share of the work. My fellow-worker cannot wring more from the insufficient material than it is able to supply. But I believe, nevertheless, that his conclusions will be held to mark a new departure, for they give a geological purview of a hitherto unknown land, extremely difficult of access, and, besides, deal with one of the mightiest mountain systems of the world. Professor Hennig's work will appear shortly as a volume of the scientific results of my last journey. The following lines, written by Professor

Hennig at my request, will certainly awaken interest among geologists:

The older deposits consist of white, grey, or dark grey quartzites and phyllitic schists, as well as subordinate beds of slaty crystalline limestone; the series is so strongly metamorphosed that if it contained originally fossil remains, these are quite destroyed. The series is penetrated by an intrusive formation mentioned below, and in connection with the eruption has suffered a plainly perceptible metamorphosis by pressure; it is therefore older than the other. Most certainly it forms a direct prolongation running east and west of the Jurassic schists and quartzite with limestone which Hayden has described from Lhasa and the country north-west of the town of Gyangtse. The formation has its chief extension in the Brahmaputra valley, but still it occurs, though very seldom, on the northern flank of the Trans-Himalaya and in western Tibet.

Younger than this series are the dark grey and reddish limestones which constitute the main mass of the base of the west Tibetan highlands. The limestones contain species of Orbitolina and radiolites, and correspond to the Aptian and Albian Cenomanian. Still younger sedimentary rocks, containing fossils, have not been found in the region traversed by Dr. Sven Hedin.

The above-mentioned Jurassic and Cretaceous deposits are, as stated, intersected by an eruptive formation, which, in the Brahmaputra valley, consists of ultrabasic peridotites, varieties of gabbro and granites, the first of which are often converted into serpentine. This formation forms a part of the eruptive formations known both in the eastern and western parts of the Himalayas which are in general ascribed to the Eocene age. Within the Trans-Himalaya itself it consists of intrusive granites (white granite associated with alkali and lime, and grey hornblende granite or quartz biotitic diorite of the Kyi-Chu type), pegmatites, granitic porphyries, diorite porphyrites, diabase, etc., of real vitrified surface lavas, as liparites, trachytes, dacites, andesites and basalts, as well as sub-aerial volcanic tuffs.

More recent than these formations, and lying unconformably upon them, is a formation of greyish-green, violet or reddish-brown conglomerates, sandstones, and schists, of which it has in many cases been shown that it has been produced at the

expense of the porphyry-like intrusive rocks in the granites and peridotites, and therefore is of later than Eocene age. The formation, which is often developed as a very insignificant product of weathering, has no fossils at all.

It is overlaid unconformably in the Brahmaputra valley by a grey horizontal deposit of sandstone conglomerate which belongs to what is described by the geologists of the Geological Institute of India as Pleistocene.

It is worthy of remark that the foundation of the Brahmaputra valley, except for the younger tertiary deposits which occur throughout the area examined, is built up of older Jurassic deposits and low down of parts of the Eocene eruptive formation, while the base of the heights of the Trans-Himalaya and of the western Tibetan plateau consists of Cenomanian limestones and also—in the Trans-Himalaya—of a plainly recognizable system of dikes and intrusive sheets of the above-mentioned eruptive formation. These circumstances show that the Brahmaputra valley, which separates the Himalayas and the Trans-Himalaya, must be considered in its present condition as a deeply excavated erosion valley, and that faults do not play the leading part here which Oswald has assigned to them in his article based on Dr. Sven Hedin's preliminary communicatior

CHAPTER XV

A CRITICAL SITUATION

HOWEVER warmly one loves cold Tjbet, yet after two years on the storm-lashed heights of this country, one longs to return to the perpetual summer of India. I had already exceeded the space of time for which one can endure without injury a continued sojourn in highly rarefied air, and at Tokchen I revelled in the thought that only one more high pass lay on the route which would lead me down to the shade of Himalayan cedars and the palms and mango trees of India.

So I thought in my innocence. I knew the road through the Sutlej valley only from maps on a small scale which I had with me, and from the succinct descriptions published by Ryder and Rawling. Their expedition had started from Gartok, and had therefore to cross the Ladak range by an awkward pass before it reached the Shipki. I, on the other hand, intended to follow the course of the Sutlej straight from the holy lake and the Langak-tso. The Englishmen had made their march in midwinter and yet had not encountered any serious difficulties, while I had midsummer before me and therefore ought to perform the task more easily.

Yes, summer is a glorious season in Tibet. But in the higher regions of the Sutlej's course winter is much more preferable. The rainy season did not neglect its duties this year, and we had been thoroughly soaked several times already. The rivers might be swollen so that they overflowed their banks, and we might get into great

difficulties in crossing the tributaries. I did not think of these things beforehand. But the day was to come when I should envy those who could avail themselves of the bridges of ice over the Sutlej in winter. My great aim now was to be on the road as soon as possible. I felt that I should soon be at home. But the way to India was much longer than I expected when I measured the distances on my map with compasses in Tokchen.

Even in Tokchen a formidable obstacle presented itself. I had thought of travelling on the next day, and I had to wait here nine days before setting out. The long wait had not the slightest results. Yes, one! Our animals had a thorough rest to prepare them for the hardships to come. And I was compelled to take a much-needed rest which otherwise I should never have allowed myself. I was deadly tired and quite exhausted after the wearing marches in the Trans-Himalaya, and after the past winter with its terrible cold. I lay all day long like an invalid, had lost all energy, was indifferent to everything, and tired of everything.

On the very first evening the bother began. My friend of the year before, the Gova of Tokchen, came into my tent with a friendly smile, handed me a *kadakh*, a thin white strip of stuff, as a sign of welcome and respect, and gave me a lump of *korum*-sugar from Purang, wrapped up in leaves. He was invited to take his seat on the usual felt rug, and his first question was:

"How is it possible that you are again in Tibet, Sahib? You left the country a year ago. Whence do you come now?"

"I have come over the northern mountains in order to see the innermost parts of Tibet which were closed to my caravan last year. I told you then that I should come back, and here I am."

"I cannot understand you, Sahib. Last year I was duly informed of your approach. This time I have only heard it said that you had turned up at Saka-dzong, and

that it had been proclaimed all along the *tasam* that you were staying in the country without permission, and were not authorized to travel anywhere but towards the north. I have received no orders, however, and I really do not know what to do with you."

"Oh, I can tell you that. You must get for me to-morrow morning early the yaks I need, and see that I travel safely on the road to Tirtapuri. You know that the authorities in Lhasa are, as usual, anxious to get rid of me. Well then, help me on. I promise that from Tirtapuri I will follow the course of the Sutlej down to India."

"Tirtapuri! yes, that is all very fine. But I have not yet received any orders, either from Lhasa or Gartok. I know only too well what happened last year. Then you asked me for means of transport to the Tso-mavang. I helped you to reach the lake and then you remained there a whole month. Afterwards I had to bear the blame."

"I hope you were not punished?"

"No, but I was warned not to meddle with Europeans in future without orders. And I was reprimanded for not having prevented you from sailing in your boat on the holy lake."

"The boat did not do any harm to the holy lake?"

"The gods may be angry. The lake is their property. The pilgrims finish their pilgrimage round its shores. The Tso-mavang is too good to be navigated by boats."

"This year you need not be alarmed. The boat is not with me; you may convince yourself of that. I will not stop a day at Tso-mavang, but will travel straight to Tirtapuri. No one has refused us yaks hitherto. The Governor of Saka-dzong supplied the first; the last are from Takche. We must have fresh ones the day after to-morrow at latest."

After long consideration the Gova answered:

"I will consult with my people and then give you my answer."

And so he went. I knew him for an honest man.

Now he stood between two fires. He would gladly have obliged me, but he could not be unfaithful to his duty. Experience had made him wary. He had a grudge against me because I had been before in Tokchen and thereby got him into trouble. And it is always more difficult to wriggle out the second time. Dorche Tsuen had given notice all along the *tasam*, the great high road to Ladak, that I must not travel in any direction but to the north, the way I had come. I was now apparently stuck fast, and my fortune was about to take a very peculiar turn.

After an hour our three yak-drivers from Takche came to the tent door. The oldest, in great excitement, and his voice interrupted by sobs, said:

"Sir, the Gova of Tokchen and five other men have threatened us with a hundred stripes each, because we have brought you here without permission."

"Impossible! Do not be alarmed; whoever promises you a beating will have to deal with me."

"Yes, sir, there is one way of saving us from it, that is, if you will go back with us over the Surnge-la to Takche."

"No, listen to me. I have at last reached here, and I must hurry off to India as quickly as possible."

"Yes, but the Gova says that he will let us off the beating if we take you home with us."

"What have I to do at Takche? I cannot stay there for ever."

"You are to go on from there to Kyangyang and the Pedang-tsangpo. We are told that you must return by the very same way you came."

And thereupon the yak-drivers with their lachrymose faces threw themselves down before me, begging me in the most beseeching terms to accompany them back to their tents.

Now I perceived that it was only by pure good luck that I succeeded in passing through the forbidden land. If the nomad chiefs on the Pedang-tsangpo, at Selipuk, in the

Kyangyang valley, and at Takche had known what the Gova of Tokchen knew, they would not have given us a yak on hire nor sold us a handful of *tsamba* unless we had consented to turn back and travel eastwards... How often had we met with the same experience as now! Each magistrate wished to relieve himself of all responsibility, and therefore tried to persuade me to return to the place I had come from. One would have thought that the Gova of Tokchen would have been satisfied if he saw me disappear in the direction of India. But he thought only of his own safety. No one should reprimand him for helping me to pass through his territory. As I had now come from the north, there was nothing for it but to drive me back to the north. The situation was critical. I must watch the course of events.

Darkness had come when another guest visited us, this time a welcome one—rain. It fell closely and heavily and pelted monotonously over all the country. The valley was turned into a swamp, and the mud squelched under the feet. Two tired horses, which had had a feed of barley by the tents, stood half asleep under their soaked rugs, with dripping manes and trickling tails. We could not help wondering whether this deluge would ever thoroughly dry up again. My tent was strengthened by extra covers and a ditch was digged round it, or I should have been in danger of being drowned as I lay in my bed on the ground. All night long the rain fell in torrents, but when the morning sun poured its gold down on the valley of the Samo-tsangpo out of a clear blue sky, all the mountains of the country glistened with blinding white new-fallen snow, as if winter had spread its pall over the bier of the too-soon-departed summer.

The Gova presented himself at my tent with his suite. He looked depressed and it was some time before he could find words. At last he began:

"I have consulted with my people. We are all agreed that I cannot and dare not have anything to do with you.

I was warned the last time, and if I help you again I shall be punished. It is best for us all that you should return to Takche."

"You can quite understand," I returned, "that I have no thought of marching farther northwards when I must hasten into India as quickly as possible. But I do not wish to involve you in any unpleasantness, so, if you will send an express to Lhasa to ask for instructions, I am ready to wait until the answer arrives."

"You cannot wait so long, Sahib. I will hold counsel with my people once more."

Then the party trooped off, but only to be succeeded by a new figure, a *yango* or inspector of transport animals and caravan traffic on the section of the *tasam* lying between the stations Parka and Shamsang. In this capacity he is generally on the road, and it was only by chance that he was in Tokchen. He came most humbly, almost crawling, into the tent, and the bale of red woollen material from Lhasa, which he begged me to accept as an offering of friendship, showed that he had a particular favour to ask.

"You say that you wish to travel to Tirtapuri, Sahib. Why did you not go through Yumba-matsen when you were at Selipuk? If you will promise to go straight to Parka, I will provide you with baggage animals, but you certainly may not travel by the holy lake to Tirtapuri. Oh, Sahib, for the sake of the Lama Kunchuk, for the gods' sake, turn back to Takche! The men and the yaks from there will be detained here for you. They had no right to bring you here, and you have no passport from Lhasa. The instructions the government has issued are much stricter than before. Oh, Sahib, go back to the north!"

I smiled, patted the *yango* on the shoulder, and answered slowly, accentuating every word:

"My way runs along the Tso-mavang to Tirtapuri. There is no other way for me."

He rose angrily, received his bale of material back again, and tramped off to the black tents.

A year, almost to the day, had passed away since I had for the first time pitched my tent in Tokchen. When I then asked permission to explore the forbidden roads over the mountains to the north, I received a peremptory no in reply. Now I was begged and implored in the most moving terms to go thither, and prayers and threats were employed to induce me. Yaks and guides were kept ready. I might have laid down the condition: "Procure me ten good horses and provisions for two months; let me choose my own route over the mountains, and I will promise you to go to Takche." This would certainly have been agreed to, only to see me disappear in the direction I had come. A curious fate, a singular country! When I try to steal into Tibet I find the frontier closed. And when I have succeeded and wish to slip out again the frontier is also closed with locks and bars. Never had such a good opportunity presented itself, and I had plenty of money. I might have gained two more Trans-Himalayan passes and established my headquarters beside some lake or other. Why did I not do it? Yes, it was stupid of me. But I had left my relations far too long already without news of me, and I knew that their anxiety would increase with every day that passed. And last but not least—I was tired of Tibet! I had now had enough of it; another autumn and a winter among the everlasting heights would have been too much for me.

One day followed another without anything remarkable happening. One day the *yongsun*, or head of the privileged commercial mission from Tibet to Ladak, came to Tokchen. He had brought red Tibetan woollen materials for sale, and I made a large purchase, for all my twelve men wanted new suits. The transaction had also the good result that the men were fully employed for some days. 'Abdul Kerim's tent was turned into a tailor's shop and clothes were cut out, sewed and fitted on all day long.

Our friend Sonam Ngurbu made another interruption in the monotony in which we lived. He had been delayed on the way through the nomads in the Paryang valley refusing to supply him with provisions. Unfortunately they had bravely resisted the strange chief and his unfair demands, and therefore Sonam Ngurbu was in exceedingly bad temper when he reached Tokchen. His love for the Swedish army revolver had not cooled down, and he tried to wheedle me into an exchange of the revolver for an old rotten wooden saddle. As this failed, he said that the Garpun would soon come down upon me and drive me up to the Chang-tang.

The Gova of Tokchen remained friendly and sent secret messengers to my tent at dusk to ask me to keep quiet and wait. Two officials were hostile to me, but they would soon leave, and then we should have our hands free. Indeed! those officials seemed not to go away. On the contrary, more were fetched by messengers, the Govas of Pangri and Hor, through whose districts I had passed last. It was like a little political congress in which no one was willing to take any responsibility. The Tibetans held councils all day long, and we saw them going from tent to tent or sitting in small warmly-disputing groups out in the sunshine. If I would only return to Takche they would willingly defray all the expenses. But I would not.

One day came our friend the ex-Gova of Kyangyang, and he was soundly rated by his colleague of Hor for letting us travel to Hor without permission. Now Kyangyang would abuse Pedang, and so on along the whole line. Saka-dzong, where we had received the first yaks, would be the last in the sequence. A terrible tumult might be anticipated in the labyrinths of the Trans-Himalaya, and it was a real stroke of luck that it had not broken out before, or it would have been all up with the last discoveries.

Some fine summer days followed, and I delighted in the warmth of the sun on the thin tent. The Samo-tsangpo, which had lately been much swollen, fell again. On July

22 autumn returned and rain washed the valley. The brook increased into a dirty grey, rumbling volume of water measuring 173 cubic feet per second.

On July 23 I hoped that the days of imprisonment had come to an end. The chiefs, accompanied by their servants, came to visit me, and, as far as room permitted, they were all accommodated in Abdul Kerim's tent. The Gova of Pangri took the lead and spoke in the name of the others. He capitulated all the reasons which made a retreat northwards necessary. As he showed no signs of coming to an end, I interrupted him and reminded the assembly that the Gova of Pangri had no authority in Tokchen. Another speaker interfered and told me that all the chiefs would be shortened by a head if I did not return to Takche. In order to bribe me, every one of them laid a parcel of woollen material before me.

I perceived that I should never prevail with them, so to put an end to the discussion I asked:

"Then you will give me no yaks for Tirtapuri?"

"No!" they replied with one voice.

I got up quickly and went across to my tent, while the Tibetans looked silently and doubtfully at one another.

Then the Gova of Pangri came and begged for another word with me.

"Sahib," he began, "as I shall at any rate be beheaded because I have let you through my district, I may as well give you yaks for a journey to Parka."

"Good! Parka is at least a little nearer to Tirtapuri. Have the yaks ready to-morrow."

"But I have no yaks myself. You must hire them in Tokchen."

The Gova of Tokchen was asked, but he had no mind to agree to the proposal. So we had to give up this plan also.

I relate all these consultations to show how things go in Tibet. They are extremely characteristic, and most travellers have had some such experiences. The authorities are stubborn, but always polite and friendly.

It was evident that I must help myself. The caravan consisted of ten horses and mules. Nine should be laden and I would ride the white horse I had bought from Kamba Tsenam in the far east. We could not expect the honest Tibetans to get themselves into difficulties on our account.

"We start to-morrow morning," was the order I gave my men.

So our last evening in Tokchen came on. Rain poured down from heaven, and thunder rolled so heavily in the mountains that the earth trembled, and the turbid stream rose more rapidly than before.

Early in the morning of July 24 the tents were taken down, and the loading had already commenced when a messenger announced that I should have yaks if I would wait a little. Of course I was so obliging as to wait till the Gova of Tokchen came with a new proposal.

"We have decided that all the chiefs now assembled in Tokchen shall escort you to Parka in order to explain there the state of affairs and to see that all goes well. We need, however, a day to get ready. To-morrow you shall have the yaks."

"I have waited long enough. I have no more faith in you."

"I will give you an undertaking in writing that everything shall be ready to-morrow."

"Very well, then, I will wait until the document is ready."

Lobsang went with the Gova to his tent, but soon came back with the information that the Gova had repented of the matter.

Thereupon the signal for starting was given. The horses and mules were quickly laden, and we moved off down the valley in the sight of all the Tibetans of Tokchen. The animals had rested and were in fairly good condition. Their loads were heavier than usual as there were no yaks to help in transport. Our party marched on over meadows and screes on the left bank of the Samo-tsangpo, passing

the bend of the river where we had pitched camp 211 the year before. Now the valley expanded and we saw the great holy lake again. Yonder appeared also the summit of Kailas, the holy Kang-rinpoche. Lobsang and Kutus threw themselves full length on the ground and touched it with their foreheads to salute the gods of the mountain.

The camp was pitched just below the mouth of the valley on the right bank. The day was bright and clear, the sunshine glittered on the blue mirror of the Manasarowar, and, unconscious of its own beauty, spread around me one of the grandest and most famous landscapes on earth. I felt that I was free and on my way home. Yet why did no dark troop of horsemen appear in the mouth of the valley? Why did they not come after us, all those chiefs of Tokchen, Pangri, Hor, and Purang, who had recently told us we must not on any account pass along the shore of the holy lake? We were only thirteen men and badly armed. The Tibetans despise the men of Ladak. I was the only European, but I was in Tibetan costume. They might have compelled us to do anything. They might have driven away our horses under cover of night, and thus have fettered us. And if nothing else would do, they might have called out the nomads of the country and armed them with guns and sabres. But not a hand moved when we tore off the bonds of our imprisonment before their eyes. Was it my lucky star or a reflexion from the holiness of the Tashi Lama which accompanied me? Perhaps the Tibetans simply looked upon me as an *enfant terrible* whom it was vain to watch. I had always been turned out everywhere, and yet I had crossed the country in all directions, and had turned up in places where I was least expected. I was like the wind, no one knew whence I came or whither I went.

However it might be, no horsemen showed themselves at the mouth of the Samo valley. We were left alone and slept peacefully on the sacred shore.

CHAPTER XVI

TO THE CONVENT OF "ST. SOW"

WHEN in the previous year I spent a memorable summer month at Tso-mavang, the Manasarowar of the Hindus, and lived on its waters, I felt like a master in my own country and a seafarer over my own water. Now we were only a flight of birds of passage which longed to leave the holy districts.

We marched over the steppe by the shore where grass grew thick and freely after the abundant downpours of rain. There were grazing 4000 sheep, with loads of salt on their backs. Their drivers had set up their tents close together, and they said that they came from Chang-tang and were on their way to the fair at Gyanima.

On the left lay the surface of the holy lake with its changing shades, while to the right we had the large lagoon into which flow the brooks from the valleys Pachen and Pachung. The water which streams from the lagoon into the lake had the year before formed a small brook, but now, after the heavy rains, we found ourselves suddenly on the bank of a considerable river almost a hundred yards wide. It looked, however, worse than it really was. The current was extremely slow, and the depth was only three-quarters of an inch. The whole discharge amounted only to about 185 cubic feet a second. The fording of the river was troublesome only on account of the mud, in which the toiling animals sank up to the knee.

We encamped on the compact sand and gravel of the beach. To the north we could see Pundi-gompa on its

cliff on the flank of the Pundi mountain, and a small white spot which had been visible in front of us all the day proved to be the monastery Langbo-nan. Two of my men thought they could see Tugu-gompa also; they had eagle's eyes; to me this monastery was invisible even through the field-glass. Kang-rinpoche and Gurla Mandatta were veiled in clouds, and only late in the day did the mountain of the gods look out distinctly from between white clouds. Camp 453 was pitched on the bank of the Gyuma-chu, which carried 140 cubic feet of water.

All night the country lay under a dark awning of clouds, and the temperature did not fall below 45°, quite a summer night once more. While the caravan was following the shore to the Chiu-gompa, I, with Lobsang and Kutus, visited the young prior Tsering in Langbo-nan. Everything was the same in his roomy cell; he sat on the same divan behind the same red lacquered table, and the sacred books lay, as before, on their dusty shelves. The only difference was that Lama Tsering was a year older; he was now thirteen. The older monks of the monastery kept him company. There he had sat all the year day after day, had heard the paper in the window frames rustle and crackle, and had listened to the winter storms as they swept howling over the heights. He drank his morning tea out of a small child's cup and counted the beads of his rosary. In the presence of the monks he must put on the dignity of a prior. But the rogue's eyes flashed, and he laughed childishly when I related some of my adventures.

"Why are you dressed this year like a Tibetan?" he asked. "Last year you wore a European suit."

"I should never have got through to Bongba and Sakadzong in European costume," I replied.

"True, true! Are you coming here again?"

"Yes, I hope to see you again, Lama Tsering."

We had no time to sit long. A bag of flour and a lump of sugar were handed me as a present, and were

LAMA WITH A TEMPLE DRUM. *Vol. III. p.* 186.

Sketch by the Author.

requited with a handful of silver rupees. In the court, where a cloister servant held my horse, we said good-bye to the monks, and as I rode away the young prior, sitting at the window, nodded farewell with a friendly smile.

The monastery Chergip-gompa lies lonely and forlorn in its valley mouth. We do not stop there, but hurry past the well-known boulders, caves, and *chhorten* of its mountain spur, and make ourselves comfortable below Chiu-gompa on the same spot as last time. The position of the shore line seems unchanged, the heavy rains not having raised the level of the lake appreciably. But the rainy season has only just begun this year, and no doubt long continuous rains would cause Tso-mavang to rise.

In Chiu-gompa also we found old friends. Chief among them was the young monk Tundup Lama, who, with a lump of butter as a gift of welcome and with protruded tongue, found his way into my tent. He had become thinner and bent, dragged his feet as he walked, and had a bad cough. But he was still the same kindly, cheerful cloister brother as at our last meeting, and I was grieved that he should pass a purposeless life between the dark mouldy walls of his cell, while I enjoyed unbounded freedom among the fresh glorious mountains. All the inmates of the monastery visited us, monks, herdsmen, fuel-gatherers, and water-carriers, nay, even Tundup Lama's old mother, and every one received a small present for old friendship's sake.

A party of Hindu pilgrims were camping on the shore under the open sky. One of them was a very comical freak, about fifty years old, copper-brown, with black whiskers, red turban, a tattered mantle, which a merchant of Ladak had given him, and a pilgrim staff in his hand shod with an iron ferule. He wanted to return to India through Taklakot, and begged for a rupee that he might eat his fill for once.

Chiu-gompa was a critical point, as I knew very well from the year before. But the night passed quietly and

without disturbance, and no dark horsemen appeared in the morning. We left the monastery people in their fearful isolation, and heard the murmur of the holy waves die away behind us as we marched down the Ganga bed between the two lakes. The path to the next camping-ground ran over flat hills and swampy meadows on the north shore of the Langak-tso. Here the inhabitants of the district Parka are wont to feed their flocks in winter. Now we saw only a solitary herdsman and some yaks.

On the way we came upon a tramp hideous to behold, dirty, hungry, and clothed in nothing but rags. He defended himself stoutly with a thick stick when the dogs attacked him.

"Give me a copper, sir," he begged in a whining tone.

"Do you know any by-way to Tirtapuri south of the *tasam*?" I asked.

"Yes, I know one."

"If you will show us the way you shall be paid a rupee a day besides free rations."

"Gladly! But if suspicious horsemen appear I must make myself scarce, or I shall be beaten to death."

The new pilot of the caravan, which the wilderness had given us, was called by my men simply the "Beggar," and this name he retained as long as he was with us.

At sunset a violent south-west wind arose and the waves beat against the shore. The clouds round the crown of Kang-rinpoche parted, and a faint purple gleam lighted up the royal mountain. I had fixed it on my photographic plates the year before and drawn it from all sides. Now I saw it for the last time. I asked no more from it, for I had looked enough at it and now saw it only as in a dream.

From a small hill near the camp we could perceive the tents and huts of Parka. Of course our white tents and our camp-fires must be as plainly visible from there. Why, then, did no one come to force us to take the great high road to Ladak again? I do not know, but no one came, and this night also passed quietly.

Close to the west side of the camp the river flows through the plain from the valley which runs due east of Kang-rinpoche, where the monastery Tsumtul-pu-gompa lies at the mouth. This river, too, had received its share of rain; it carried 530 cubic feet of water and was 140 yards broad. Its bottom was extraordinarily dangerous, so that the men had to carry the loads over. My horse nearly stuck fast in the viscous mud and almost threw me into the water.

The old dried-up Sutlej bed lies to the left as we march over the level ground, where the horses and mules become restive at the sight and smell of the juicy pasturage, and walk with their noses to the ground all the way. Then we cross the Sutlej bed, in which the rain-water has collected into large pools. At the place where we crossed the river bed next day, July 29, its bank terraces were as perfect as though they had been exposed to erosion at the present time. Here also were the ponds we had seen in the year 1907; they were no larger, for they are constantly fed by springs and are independent of rain.

We leave behind us on the left the narrow valley in which the Sutlej, after apparently losing itself in Tso-mavang and the Langak-tso, is born again of spring rivulets, gradually to grow into a great river along which we shall travel through the Himalayas. For a short distance therefore we lose sight of the river, which is here an insignificant brook, and pitch camp 457 on the hills to the north of it. Here grow large quantities of wild leeks, and Gulam gathers a good supply to season the inevitable mutton cutlets which daily grace my table.

It was all we could do to set up the tents before the rain came. The clouds lay actually on the ground, and there was not a glimpse to be seen of the mountains. Twenty ditches had to be digged to guard against flooding. The rain poured down in bucketsful and produced a combination of singular notes. Sometimes it sounded like military music, sometimes like a vibrating roll on tightly

stretched drum parchment. But amidst it all we seemed to hear the bleating of fat sheep and the grunting of sleek yaks. Lambs and calves rained down from heaven, milk and butter for the poor nomads.

I listen and to my ears comes the sound of boiling pots filled with fat meat and of singing kettles in which the tea mixed with butter is prepared. Prosperity and happy days descend with the heavy drops. I hear the ornaments of the women tinkle and the noise and laughter of little naked well-fed children who are playing round the black tents. The nomad lays his gun under the border of the tent cloth; he is not, as in lean years, dependent on the chase, but can afford to kill a sheep now and then.

The rain continues heavily and monotonously. Beyond the mist I seem to see it fall like the whitest cotton-wool on the high alpine firn-basins, the cradle of the rivers. Outside there is a swelling roar; it is the Sutlej, which rolls its volumes of water beyond Tirtapuri. The river is as yet a child playing in the valley, but it soon grows larger and stronger, and every drop of rain falling in the mountains adds to the immense force with which the river saws its valley through the Himalayas. The rain still falls and pelts and patters on the grass. I seem to hear the streamers on the passes flutter and the prayer-mills hum; a thousand voices seem to cry from heaven over the blessed land, "Om mani padme hum."

The rain pours down all night and we march on in the morning in heavy rain. The air is raw, damp, and chilly, and I wrap my Tibetan skin coat about me and draw the hood over my head. The men tie round them empty sacks. Dripping and uncomfortable we splash along to the west-north-west over a small rise, and then direct our steps down to the right bank of the Sutlej, where the small monastery Dölchu-gompa is built on a hill, while steep mountain walls flank the left bank.

There is not much to be said about Dölchu-gompa. In its present form it was erected about the time when Soravar

Sing conquered Tibet. A Kanpo Lama, four Getsul or novices, a superintendent, and a steward were now the ecclesiastical inmates of the monastery. The golden Sera near Lhasa is said to be the mother cloister of Dölchu, and to give the monks 600 *tenga* yearly for their maintenance. With this allowance they have to manage as well as they can, and in return they must undertake the care of souls in their district. The *lhakang* or hall of the gods is poor. In the middle of the altar table stands a small *chhorten* with the ashes of the lama Lobsang Dentsing who founded the Dölchu monastery two hundred years ago. So at least declared the lama who showed us the sanctuary.

Fourteen tents were pitched at the foot of the cloister hill. Their inmates were not nomads but wool-dealers from Nepal and Ladak. They told me that it paid them to buy up wool in this country and that salt was the only other article of trade on which a profit could be made. Five sheep's loads of salt were equivalent to four sheep's loads of barley, and the value of every sixth load of salt was the duty demanded by the Government.

Dölchu is particularly interesting because here the springs well up in the Sutlej bed which are now the apparent sources of the river, if we neglect the real genetic and historical source lying to the south-east of the Tso-mavang. The name Langchen-kabab, or source of the Sutlej, is used of both places. The hill on which Dölchu-gompa stands is supposed to have the form of a *langchen* or elephant.

In the evening a strolling lama, a mendicant monk from Kham in the extreme east of Tibet, came into our camp. He was equipped with a spear, a drum, and a flute made out of a human shank bone. I promised him a rupee if he would stand still for half an hour, but I had not sketched much of his portrait when the wanderer decamped hastily.

"You must keep to your bargain," growled Lobsang after him.

"I will have none of the bargain or rupee. The fellow bewitches me with his eyes."

Another promise was not fulfilled, but for sufficient reasons. A Ladaki had promised to let me have nine asses on hire for the journey to Tirtapuri. But when he learned that the tributaries to be crossed on the way were so swollen that no ass would be stupid enough to venture through them and endanger his life, he sent me word that he could not let me have them.

We had therefore to look after ourselves. We waded just below the monastery through the crystal-clear brook fed by the springs. It was the young Sutlej, which was to keep us company from here all the way to Simla. If we had always camped on the river bank, every new camp would have stood at a slightly less elevation above the sea than the preceding. At Dölchu we were already a little lower than the Langak-tso; the lake has a height of 15,056 feet, while the monastery stands at a height of 14,820 feet. As we proceeded farther it turned out that no rule held good with regard to the relative heights.

The days of childhood soon pass away. It was not long before the Sutlej had left its infancy behind. In an expansion of the valley we hear the roar of great volumes of water rolling down. The affluent Chukta falls through a gap in the erosion terrace and divides into five delta arms with thick greyish-brown foaming water above the gravelly ground. The fifth arm of this river, which rises in the Trans-Himalaya, was 58 yards broad and discharged 530 cubic feet per second. It was, indeed, about fifty times as large as the source-stream of the Sutlej, but the latter flows all the year round, whereas the Chukta swells up after rain but fails altogether in the cold of winter.

After we have passed over without a wetting we follow the right bank of the united river, and then march along the river bed itself at the foot of an erosion terrace 25 to 30 feet high. On both sides old terraces rise about 130 feet above the valley floor, evidence of a time when larger

volumes of water than now poured down the valley and when the lakes had a constant outflow.

After a time we come to another break in the right terrace, and another tributary, the Goyak, empties itself into the Sutlej. The Goyak discharged probably 100 cubic feet of yellowish-brown water thick as pea-soup. We are always crossing feeders, each contributing its mite, and the river gradually increases.

The Sutlej valley has here a westerly direction; it may be about 1¼ miles broad, but if only the level valley floor be estimated, the breadth is one to two hundred yards. Some stretches are clothed with excellent grass, and we wonder that no nomads make use of it. There is no life except some hares scuttling through the grass. The camp this day, 459, is pitched on the bank of the Sutlej at a height of 14,574 feet. Here the outflow of a spring debouches, and its bluish-green water is at once swallowed up in the yellowish-brown tumbling flood of the river. In the middle of the day the spring water had a temperature of 52.8°, while the river was warmed up to 61.3°.

We had become tired of the peaceful repose of the highlands, and now we were to hear noise enough. It was not only the loud heavy roar of the river, no—rain, too, pelted down on the slopes, and thunder rolled over the valley. When we broke up camp on August 1 the rain still poured down from heaven. Now the rainy season was in full swing, and we, moreover, had travelled from the central parts of Tibet to the peripheral Himalayan regions which catch the greater part of the precipitation of the south-west monsoon.

About a hundred yards below the camp the Sutlej enters a corridor-like trench between precipitous cliffs, which it is impossible to pass through. The path therefore mounts to the ridge on the right side of the valley. We have not proceeded far up there when we are stopped by another valley excavated deep as a grave below our feet. As far as we can see through the rain it comes from the

north-east. Grass lends a greenish tinge to the valley bottom, and in the middle shines a winding river like a bright yellow riband. We halt at the edge from which the path winds in steep zigzags to the bottom of this side-river; the difference of height is only 105 feet. The river looks small in the distance. But we soon hear its rushing roar, and when we reach the bank we are quite dazed when we look at the heavy reddish-brown stream of water. The river is called Tokbo-shar. A short distance below the ford the valley narrows and the Tokbo-shar forces its way through a rocky portal to join the Sutlej.

We deliberated a little on the feat before us. The rain fell in bucketsful, and it was almost a consolation that we were already wet, for it would be a miracle if we got across this river, which seemed red with blood, without a good bath. All the loads carried by the horses and mules were piled up as high as possible and roped very securely. Some of the men searched for a convenient ford. Where the water rises in high boiling domes, smooth treacherous stones may be expected on which the animals may slip and fall, while at places where the water forms small regular waves, a level bottom is probable. The fording-place finally chosen looked anything but inviting, but there was none better and we must get over.

The river consisted of three narrow arms with breadths of 23.7 and 36 feet; in the middle one the depth was 40 inches. This is not much, but it is more than enough when the water forms rapids and threatens to sweep down man and beast. The aggregate volume was 953 cubic feet, so that the Sutlej received a considerable addition to its water.

First the ford had to be tested. Rasak and the Beggar undressed, took hold of each other, and rolled and staggered like drunken men in the water. They really needed a bath. But it was rash of the Beggar to expose his back, for it was striped like a zebra by the strokes of a whipping which had been administered to him somewhere or other. He therefore stood confessed a notorious rogue. But what

did that matter to us? Now he belonged to our travelling company and he played his part excellently. Both crossed all three arms without falling and came back to act as pilots.

Now all my men undressed. The baggage animals were led over one by one; two men walked on either side of a wading animal to lay hold at once if he fell. I was in great anxiety about my maps, notes, and sketches. But all went well, and I rode last through the river preceded by a pilot.

When the men had dried and clothed themselves again, we rode on along the terrace platform. We had not gone far when the same scene was repeated. A new tributary boiled and foamed below our feet, the Tokbo-nub, which had carved out a channel just as sharply marked as its neighbour's, and also flowed to the Sutlej through a rocky portal. We had no choice.

Again the ropes were tightened round the loads, the men undressed, horses and mules plunged into the water, stumbled over the boulders and planted their feet firmly so that they should not be washed away. We did not hear the pelting rain as the Tokbo-nub rolled 850 cubic feet of water past the waders.

The path along the gravelly terrace is marked by cairns and *mani* walls, indicating the proximity of a temple. The Trans-Himalaya, where the two tributaries collect rain-water in the southern valleys, is not visible in this weather, and to the left we only dimly perceive the deep corridor of the Sutlej, cut through solid rock and now completely filled with floods of water.

The wet, tiring day's journey nears an end. A *mani* wall, a hundred yards long and unusually well kept, points to the monastery Tirtapuri, which stands on a terraced slope and is surrounded by a guard of *chhortens*.

I rode up to the sanctuary. The prior, a Kanpo Lama, did not deign to show himself, but sixteen out of the twenty-one monks of the cloister were present and had no objection

to take me round. They pronounced the name of the place Tretapuri, but the word Tirtapuri is of Indian origin and signifies "pilgrimage resort." Sakya-toba, softly smiling and plunged in thought, is enthroned on the altar in the *lhakang*, which otherwise contains nothing out of the common. But yes, I was shown some flat dark stones cut round, which might be diabase or porphyry. They bore distinct and rather deep impressions of the hands and feet of holy men long fallen asleep in Buddha. In one also was the imprint of a horse's hoof. *Pia fraus!* The great thing is that the crowd believes in them and continues to humbly make offerings to the monastery.

In the anteroom of the *lhakang* two *nekora*, or pilgrims from Lhasa, had taken up their quarters, and a Hindu was in their company. The object of his journey was Manasarowar and Kailas. He had holy water from the Ganga lake in a brass can, and this miraculous fluid he wished to exchange for my horse. But I had no inclination for this stroke of business; there might be only ordinary water from a village pond in the can, and I wanted my horse myself.

Through an alley of *chhortens* the path runs down to another shrine, the Dorche Pagmo *lhakang*, where the saint of this name sits in the company of Buddha and other potentates of the Lamaist theocracy. Dorche Pagmo is an abbess, who, like the Dalai Lama and the Tashi Lama, never dies but only renews her earthly shell. She lives in the handsome nunnery on the peninsula in the Yamboktso. The curious name signifies the "holy sow" or the "diamond sow," and the proof of her reincarnation is a birth-mark on the nape of the neck resembling a pig's snout. Her hall at Tirtapuri is damp, dark, and dismal, and only after one has become accustomed to the gloom can one distinguish the stereotyped smiles of the gods.

Outside the rain poured down and trickled over the rocks. The caravan had pitched camp 460 beside a shelf of limestone sinter where warm springs bubbled up. The

rain shut us in like a glass house. We waited therefore a while in the doorway of the dark pigsty of "St. Sow." Behind us yawned a mystical "Gotterdämmerung," outside freedom sang in the roar of tumbling cascades. How could the monks hesitate in their choice between the two? Well, in the cloister they obtained *tsamba*, tea, and bread without working. Their days slipped by peacefully and without anxiety in the service of the eternal gods. To hold services, clean lamps, perform incantation dances in costumes and masks during the great festivals of the temple, and have the care of souls among the nomads of the neighbourhood, all this was far more comfortable than to wander about with caravans, tend sheep and yaks, or break up salt in Chang-tang.

The rain did not cease. But now we had enough of the holy sow and her monks, so we wrapped ourselves in our mantles and hurried down to our tents.

CHAPTER XVII

MANASAROWAR IN ANCIENT AND MODERN TIMES

THERE is no finer ring on earth than that which bears the names of Manasarowar, Kailas, and Gurla Mandatta; it is a turquoise set between two diamonds. The grand impressive silence which reigns around the inaccessible mountains, and the inexhaustible wealth of crystal-clear water which makes the lake the mother of the holy rivers, the toilsome rocky paths that lead thence over the heights of the Himalayas, everything has aided in rendering from ancient times this wonderful country one of the most holy pilgrimage resorts or *tirta* of the Hindus. Whoever is of a pure and enlightened mind and bathes in the waves of Manasarowar attains thereby to a knowledge of the truth concealed from other mortals. Still at the present day the stranger stands on the lake shore, meditating deeply as he watches the troops of pilgrims wading into water sacred to the gods, and seeking truth there and a solution of the problem of life.

Mânasa Sarôwara means "Mânasa, the most beautiful of lakes." Mânasa means "created by the soul," for the lake was created by the soul of Buddha.

In the Skanda Purana there is a tale of Manasarowar, which is called Manasa-Khanda. The holy lake and its creation are there described in the form of a dialogue. Prince Janamejaya asks Suta, a pupil of Viasa, how the world was created. Suta relates that Dattatreya Rishi, one of the seven human incarnations of Vishnu, after he had visited the Himalayas betook himself to Benares, and

loudly praised to the Raja Danvantari the beauty of the Himalayas. He extolled that part of the mountains where Siva dwells, and where the Ganges like a lotus blossom on its stalk emerges from the foot of Vishnu.

I saw Manasa-owar where Siva dwells in the form of a Rajahansa or royal swan. This lake was formed by Brahma's soul and therefore received the name of Manasa-sarowara. There dwell also Mahadeva and the gods, thence flows the Sarju (the Karnali, called by the Tibetans Map-chu, or the Peacock river), besides other female streams and the Satadru (Sutlej) and other male streams. Whoever touches his body with earth from Manasarowar and bathes in its waters will attain to the paradise of Brahma, and whoever drinks the water will ascend to the heaven of Siva and be washed pure from the sins of a hundred incarnations, and even the animals which bear the name Manasarowar will enter into Brahma's paradise. The water of the lake is like pearls. There are no mountains that can compare with the Himalayas, for in them are Kailas and Manasarowar. As the dew is dried up by the morning sun, so are the sins of men blotted out at the sight of the Himalayas.

On the creation of Manasarowar it is said :

The sons of Brahma betook themselves to the countries lying north of the Himalayas and fasted on Kailas. They beheld Siva and Parvati, and there they remained twelve years, praying and fasting. At this time little rain fell, water was scarce, and in their necessity they went to Brahma and worshipped him. Then Brahma asked what they wanted. They answered : " We are engaged in meditation on Kailas and have to go down thence to Mandakini to bathe ; make us a place where we can bathe." Then Brahma created Manasarowar by an effort of his will. They went home rejoicing at the success of their journey, and again gave themselves up on Kailas to prayer and fasting, worshipping the golden symbol of fecundation which rose in the middle of the lake above the surface.

When the Prince asks " Which road leads to the holy lake ? " Dattatreya enumerates the chief places on the way

and speaks of the duties of a pilgrim, of which the following must be performed at the lake shore:

> He should bathe there and pour a libation of water to the shades of his forefathers and worship Mahadeva (Śiva) in the form of a royal swan. He should there make the *parikrama*, or the circuit of the holy Manasa lake, gaze at Kailas, and bathe in all the neighbouring rivers.

Kailas is the Olympus of the old Hindu world, the scene of action of the heroic figures of mystic poetry. At its foot dreams the holy lake, now quiet and smooth as a mirror, showing images of the sun and stars, now beating a melody against the shore in time with the rapid dance of the monsoon clouds on their course through the heavens from the sultry plains of India to the heart of the cool and lofty Tibet.

The clouds come trooping over the Himalayas from the south-west. The stranger who rows in his boat over the lake or wanders round the shore from one monastery to another, knows the ways of the clouds and what they mean. They are the heralds of the south-west monsoon, which does not reach Tibet till late summer. They collect their moisture from the sea, caress the coasts between Ceylon and the mouth of the Indus, bring new life to the palms and jungles, draw up the crops from the earth, and bless men with cool weather. They rush up the flanks of the Himalayas and dissolve in abundant rains. Only a small part of the rain-clouds crosses the barrier and bedews the slopes of the Trans-Himalaya, benefiting also the pastures of the nomads. Scorched and squeezed dry like a bath-sponge the rest of the clouds pass on over the high country and are lost in the air before they can reach the desert regions of Central Asia.

According to the mythology of the Hindus the Yakshas are a kind of divine beings of lower rank in the service of Kuvera, the god of wealth, who guards hidden treasures in the Kailas mountain. There dwells the powerful Kuvera

with his divine court. He had committed the care of the golden lotus lilies in the Manasa lake to a Yaksha. Absorbed in his love for his beautiful wife the attendant neglected his duty, and one night the lilies were trodden down by the world elephants which keep watch at the eight corners of the earth. Then Kuvera was wroth and sentenced the Yaksha as a punishment to live apart from his beloved wife for a whole year.

Consumed by sorrow and desire the exile spent the weary lonely days in the south, in the holy forests of the Rama mountain.

The legend is two thousand years old. Kalidasa, one of the greatest masters of Hindu literature, the author of the *Sakuntala*, has ennobled the theme and has composed a lyrical poem with the holy mountains round Manasarowar as background. The poem is called *Meghaduta*, or the *Cloud-Messenger*, and it abounds in the gorgeousness of the East and in spirited songs, glows with love and longing, and contains a host of the finest, grandest descriptions of nature.

One day one of the rain-clouds of the monsoon was floating over the summit of the Rama mountain, and the banished Yaksha called out to the rain-giver that he wished him to take a greeting to his wife in the Kailas mountain. For the clouds are Indra's envoys, and Indra is the god of the sky. First the Yaksha presents flowers to the Cloud-Messenger, and then he describes the course of the cloud before the monsoon wind from the Rama mountain to Kailas, where the deserted one dwells. He speaks in lofty verse to the messenger, which sends his proud thunder rolling among the hills and is accompanied by the royal swans, the Rajahansas, who migrate to the Manasa lake when the rainy season begins in India. In the language of poetry the wild geese which make their nests every spring on the islands of Rakas-tal are styled swans.

Kalidasa unfolds before our eyes an extremely enchanting panorama of plains and meadows, forests and groves,

towns and rivers, which the Cloud-Messenger beholds on his aerial journey. Often these descriptions are involved in a cloud of mythological allusions and relieved by scenes of pomp and love, but just as frequently we come upon passages over which the cloud casts its shadow.

This is especially true of the end of the Cloud-Messenger's journey; the following lines are from the translation of Professor H. H. Wilson (Calcutta, 1813):

Ascended thence a transient period rest,
Renowned Cailása's venerated guest;
That mount whose sides with brightest lustre shine,
A polished mirror worthy charms divine;
Whose base a Rávan from its centre wrung,
Shaken not sundered, stable though unstrung,
Whose lofty peaks to distant realms in sight
Present a Siva's smile, a lotus white.

Now on the mountain's side like some dear friend
Behold the city of the Gods impend;
Thy goal behold, where Ganga's winding rill
Skirts like a costly train the sacred hill;
Where brilliant pearls descend in lucid showers
And clouds like tresses clothe her lofty towers.

To those loved scenes repaired, that awful size,
Like a young elephant, in haste disguise,
Lest terror seize my fair one, as thy form
Hangs o'er the hillock, and portends the storm.
Thence to the inner mansion bend thy sight,
Diffusing round a mild and quivering light,
As when through evening shades soft flashes play,
Where the bright fire-fly wings his glittering way.

The tresses are the clouds, the costly train is the Ganges, which girdles Alakâ,[1] and which, therefore, in Kalidasa's poem is supposed to have its source on Kailas. It is little more than a hundred years since this erroneous view was definitely confuted.

The Yaksha exhorts the Cloud-Messenger, after his task is accomplished, to end his long journey on the summit of Kailas in the form of an elephant. Among the Tibetans,

[1] The town of Kuvera and the Yaksha.

too, whose wisdom is borrowed from India, the elephant plays a certain part in this country. In the Nyandi monastery at the western foot of Kailas two elephant's tusks, *langchen-sala-rapten*, are set up before the altar; all that the monks could say about them was that they had been there as long as the monastery itself. A monastery on the northern shore bears the name of the elephant, Langbo-nan, and, finally, the Sutlej, which periodically flows out of the lake, is called Langchen-kamba, the Elephant river.

But now let us leave the region of legend and poetry, where we vainly grope for firm ground, and search historical chronicles to see what they have to report about the holy lake.

Manasarowar does not figure in the campaign of the great Macedonian. Ptolemy did not know of the lake. Marco Polo and other travellers in the Middle Ages did not hear its name. The migrations of nations took other routes and left Manasarowar undisturbed, a wild rose among inaccessible mountains. For hundreds of years the wild geese continued to fly over the Himalayas, and pilgrims bent their steps towards the lake of truth and enlightenment, and its name was never borne on the wings of fame to Western lands.

When at length, in comparatively recent times, we seem to catch a glimpse of the lake, we still find ourselves left in uncertainty and know not what to believe. In the year 1553 the Khan of Yarkand sent his general, Mirza Haidar, with an army to raze to the ground the idol temple in Lhasa. The army made havoc in the country like a plague, but was itself decimated and did not attain its proper object. In the description of his campaign, Mirza Haidar says: "After a journey of a month a country was reached where there is a lake: it has a circumference of forty farsakh, and on the shore stands a fortress called Luk-u-Labuk. There we halted for the night." This lake can be no other than Manasarowar, for Mirza Haidar

travelled along the same road as Desideri two hundred years later.

In old writings on the Himalayan regions a Jesuit, Father Antonio de Monserrate, is mentioned, who in the year 1581 accompanied the Emperor Akbar on his progress to Kabul, and is said to have heard of a lake Manasarowar. I have obtained information about him only at second and third hand; I have not succeeded in finding any report from his own hand.

François Bernier, who accompanied the Great Mogul, Aurangzeb, on his journey to Kashmir, and described his experiences in 1699, could not compare with Ptolemy in his knowledge of the courses of the great Indian rivers, though he lived fifteen hundred years after the time of the great master. But in his scheme of the mountains in the north of India he is on a par with Ptolemy. He gives us a single mountain range named Caucasus, and Tibet shrinks up to nothing. On a map in Bernier's work, however, we find to the east of Kashmir a "Petit Thibet Royaume." The chief branch of the Indus comes from Mont Caucase, and the river receives no water from lands beyond the boundary of Kashmir. Though the French traveller inquired of merchants about the roads to the north and east, he heard nothing of the holy lake.

D'Anville's "Carte Générale du Thibet" (1733) supplies for the first time a clear trustworthy representation of Manasarowar and the Rakas-tal. This ground was investigated by Kang Hi's lama topographers. They must have stayed a long time at the lakes, for this region far in the west of great Tibet is better and more exactly surveyed than any other part of the country. The wreath of mountains round the basin gives us a correct picture of the reality. To the north rises Kentaisse or Kailas, in the south-east a brook emerges from the Lantchia Kepou mountains and corresponds to my Langchen-kabab, the headwater of the Sutlej. In the year 1907 I obtained the same results as Kang Hi's topographers. The rivulet represented as flowing to the lake

from the south-east is the Tage-tsangpo, which I have called the origin of the Sutlej. Here we come to a problem which in connection with the holy lake will claim our attention more than once in the following description.

D'Anville, following his Lamaist authority, gives the lakes Tibetan names, the eastern lake Mapama and the western Lankan, instead of the names Tso-mavang and Langak-tso, which are more correct. Of the former a better map was compiled than we find one hundred and fifty years later. Between the two runs a connecting river course. This, too, is a link in the chain of the Sutlej. In the years 1907 and 1908 the bed of this channel was dry, as it had often been before. Here we come to a second problem, the question of the periodical variations of precipitation, which are the cause why water flows out of Manasarowar only in rainy years. During certain periods the rain is so abundant that the Langak-tso or Rakas-tal also discharges water, and then only has the river an uninterrupted course. This was the case when Kang Hi's topographers reconnoitred the country and correctly named the river running out of the lakes Lan-chou or Lang-chu, that is Langchen-kamba, Elephant river, Sutlej.

But who is to blame for the fatal error which the Seigneur D'Anville, Géographe du Roi, has perpetrated? He makes the Lan-tchou identical with the Ganges, and the upper Indus a tributary entering that river. In his great work, *Description de la Chine*, Father du Halde states that the two lamas sent out by Kang Hi obtained their information about the source of the Ganges from "lamas living in the neighbouring pagodas and from documents found in the palace of the Grand Lama in Lhasa." This statement cannot be right, for the monks round Manasarowar knew very well that the river issuing from the lake was the Sutlej and not the Ganges.

The first traveller who described Manasarowar in words was the incomparable Father Desideri. He relates that

he and Freyre reached the highest elevations on the road from Leh to Lhasa on November 9, 1715, and says that "the water which streams thence westwards is the origin of the Indus, while that which runs eastwards forms the Ganges."

In the following lines he is the first to allude to the problem, since then become so difficult, of the relations of the great rivers to Manasarowar.

We travel on over a plain called Retoa, where there is a large lake, which it takes several days to go round, and from which, it is supposed, the Ganges originates. But from all that I was able to observe on my journey and the confirmatory statements of men who were acquainted with this country as well as with the empire of the Great Mogul, I am forced to conclude that the mountain Ngari Giongar (Kailas) is not only the source of the Ganges, but also of the Indus. As this mountain is the highest point from which the land falls in both directions, the water flowing down from the western side—whether it be rain-water or melted snow—runs to the second Tibet (Ladak), which is evident from the actual conditions, and after traversing it (Ladak) passes through Little Tibet (Baltistan). Then it rolls down through all the mountains of Kashmir, and at length reaches Little Guzaratta to form the mighty navigable Indus. In the same way the water descending from the east side of Ngari Giongar (Kailas) runs first into the already-mentioned lake Retoa (Manasarowar), and then continuing its course downwards forms the Ganges. A proof of this is furnished by the following circumstance. In the writings of our forefathers there is much talk of the golden sand of the Ganges. If, then, we were to assume that the origin and source of that river lay anywhere else we should give our forefathers the lie, for at no other part of the river's course (except at Kailas and Manasarowar) can a trace of such sand be detected. If, however, my theory is approved, namely, that the source of the Ganges lies on that summit and in the lake Retoa, the statements of old authors are quite in harmony with my views. For, as is known—and, I venture to say, known throughout the world—there is much gold dust on the shores and in the sand round this lake, which the rivers descending from Kailas and other adjacent mountains wash down from the surface of these mountains. Tibetans and a number of

traders resort from time to time to the lake to search for and collect the gold, and derive a large profit from it. The lake is, moreover, the object of great reverence among this superstitious people; therefore they make pilgrimages from time to time to this district and wander round the lake with deep devotion, for they believe that thereby they will secure forgiveness of sins and obtain many special indulgences.

These words were written by a Jesuit priest two hundred years ago. Desideri, who travelled with a Tatar princess and her immense retinue, had probably no opportunity of making the circuit of the lake himself and ascertaining what rivers flowed out of it. But he believes from his observations and the reports of Indian pilgrims that the farthest roots of the Indus as well as of the Ganges are to be found in Kailas. The Singi-kabab, the source of the Indus, lies not far off in the north of the Trans-Himalaya. But the Ganges! Desideri has confused the Sutlej with the sacred river of Benares, and was loath to disturb the harmony between the assertions of "our forefathers" and the occurrence, "known throughout the world," of auriferous sand on the banks of Manasarowar. We may be pretty certain that on that winter day when Desideri rode beside Manasarowar no European except himself and Freyre had any suspicion of the existence of this lake.

In winter most of the streams fail or are frozen up. If, furthermore, a snowstorm sweeps over the country, all is levelled down, and the most concentrated attention is required to unravel the hydrography. The Hindus have known of old the high alpine valley where the spring gushes forth which gives birth to the river of Benares. The Tibetans are equally aware that the watercourse which at times issues from Manasarowar is the Elephant river, the Sutlej. But if the monks living in the Chiu monastery are asked the name of the channel, they answer to this day Ganga or Nganga. Possibly this name misled Desideri. At all events it was not his fault that English topographers in much later times confused the Sutlej with the Ganges.

He was the pioneer. Who could demand of him that he should grasp in two days the scheme of these singular waterways, about which explorers and travellers have disputed and squabbled for two hundred years after his time. To me, who have explored all round the lakes for a longer time than any of my predecessors, it is consoling and refreshing to find again " il lago di Retoa " in the old diary of Father Desideri.

In the report of Father Souciet (*Observations mathématiques, etc., faites à la Chine,* Paris, 1729) Father Gaubil publishes a memoir on the sources of the Ganges " according to Chinese and Tatar maps." That we may not have to dip into Gaubil's text, I refer to his map ; it is valuable and interesting. When compared with my map it is easy to understand. The Mont Cantés is Kailas. On its north-western flank we have the source of the Indus. Why of the Indus ? Well, along its course we find Tashi-gang and Ladak, though the names are a little distorted. It is the southern branch, the Gartong, which is meant ; the main branch from the Singi-kabab was not known.

South-east of the holy mountain the three head-streams of the Ganges flow into the lake Lapama or Manasarowar. Thence a stream pours out to the Lanka lake or Rakas-tal and leaves it again to run on westwards. This river is the Sutlej. Why should it be the Sutlej ? Because we recognize along its course the names Guge, Tsaparang, and Chumurti, also corrupted.

Again we come across the serious misconception of uniting the Indus and Sutlej to form the Ganges. D'Anville committed the same mistake. Therefore it is clearly evident that D'Anville and Gaubil drew their information from the same origin—the exploration of Kang Hi's lamas. These did not travel far enough westwards to ascertain the ultimate fate of the two rivers. The drawing of the ground is in the main correct, and the hydrography accords with the reality ; the only error is that the name Ganges is inserted instead of Sutlej.

When we hear next of Manasarowar the Jesuit father Joseph Tieffenthaler is our informant. He was born at Bozen in 1715, went at twenty-eight years of age to Goa, and then for a long series of years wandered through different parts of India, noting down anything remarkable that he saw and experienced. Then in 1765 he betook himself to Bengal and applied for assistance " to the famous English nation which is well known for its generosity and its pity for the poor and wretched."

It is not always possible to gather from Tieffenthaler's reports whether they are the result of his own observations or whether he relied on hearsay. One is often tempted to apply his remarks on the classical authors, who named the Himalayas of Kumaon Imaus, to himself: " They did not see these countries and are usually wrong in their descriptions of distant regions." But we are ready to forgive him because he says quite correctly that the source of the Indus must be sought for in the mountains of Tibet.

Of Tibet he has heard that it lies for five months under a covering of snow. Thence come the softest wool, musk, and white oxtails. The land is governed by a spiritual ruler, the Lama Goru, whom he calls " magnus magister " ; he belongs to an order of hermits and is worshipped as a god. He lives in Patala. Information of this kind had reached Siberia fifty years earlier, and the Swede Strahlenberg, who was living there as a Russian prisoner of war, collected invaluable geographical material.

But now we are concerned only with the miraculous lake and the sacred rivers.

Tieffenthaler entered into correspondence with the famous Anquetil du Perron, who looked through his material and published it in his *Description historique et géographique de l'Inde.*

As regards the source of the Ganges Tieffenthaler affirms that it will never be discovered because the way beyond the gorge of the " cow's mouth " is impassable. His commentator observes that there are no impassable roads

for those who have legs to walk—" invia tenaci nulla est via." As an excuse for the father, Anquetil mentions that the sources are considered inaccessible both in Bengal and Tibet, because the holy river comes from heaven. He has no faith in the expedition which the great Emperor Akbar sent out at the end of the sixteenth century to search for the source of the Ganges. The envoys saw the water of the river gush out in great abundance in a ravine under a mountain which resembled a cow's head. Anquetil does not believe that the cow's head can rise above the real source, which must rather be looked for in the great Tatary. English explorers, however, were soon to establish the fact that the information which Akbar's envoys brought to their master was correct.

There is every reason to suppose that the maps which Tieffenthaler sent to Anquetil du Perron had been originally drawn by natives for the Emperor Akbar. For the father acknowledges that he had never been himself in the high regions but had heard news about them.

In Anquetil's description it is said of the two lakes:

> The eastern, called Mansaroar or Mansara, is very famous in the country and has, according to Father Tieffenthaler's notes, a circumference of 60 *coss* (Indian miles). The western is named Lanka and has a circumference of more than 11 *coss*. According to the statement of the learned missionary, the Brahmaputra river, which flows to Assam and Rangamati, comes out of the lake Mansaroar. From the upper part of Mansaroar, that is the north-western, a river issues, beside which is written in Persian: " the great river Sutlej which goes in the direction of the Punjab—consequently westwards."

To this sensible and correct Persian statement, which probably dates from the end of the sixteenth century, Anquetil adds the unfortunate remark: " It is asserted that the Sutlej, which flows to Bilaspur and Ludiana, comes down from that lake; but this affirmation is unworthy of credit, for it is more probable that the river flowing out of

the lake unites with the Alaknanda which waters Badrinat and Srinagar."

The Alaknanda is one of the eastern headwaters of the Ganges. Here, then, there is another example of the confusion of the Sutlej and Ganges, or at any rate a tributary of the latter.

On Rakas-tal we read: "Beside the large lake Mansaroar and on its west side is the Lanka lake, which the German missionary writes Lanka Dhé. This lake, out of which on the west the Sarju river flows, is much smaller than Mansaroar." It was already stated in the Skanda Purana that the Sarju or Gogra, the Map-chu or Peacock river of the Tibetans, comes from the lakes, not, however, from Rakas-tal but from Manasarowar. Tieffenthaler is here not sure of his facts. He says himself: "Certiora alias exploranda."

Anquetil is all the more positive. He inquires how far D'Anville is right in naming the river issuing from Lanka or Rakas-tal the Ganges. We hope in vain that he will after all decide that the river flowing out of the lake is the Sutlej. But no, he points out that it is an affluent of the Ganges, the Gogra or Peacock river. He says that D'Anville's map of the lamas is incorrect, yet this map was very much better than Tieffenthaler's.

He is more fortunate in his conjecture that the Tsangpo is the upper course of the Brahmaputra; but while Father Régis is satisfied with placing the source of the Tsangpo in the neighbourhood of Manasarowar, Anquetil takes Tieffenthaler's bait and makes the river flow out of that lake.

In conclusion he summarizes the data about the two lakes supplied by Tieffenthaler's map, namely, "the hitherto unknown sources of the three greatest rivers of that country: the Sarju, which flows out of the Lanka lake, and the course of which is marked on no European map; the Sutlej, which runs north-westwards from Manasaroar and flows towards the Punjab; and the Brahmaputra or Tsangpo, which springs from the outflow of this lake on

the eastern shore, and which traverses a large part of Tibet before it makes a bend to the south-west to pour into the Ganges below Daka."

It must have been a delight to the learned Anquetil thus to revel in the wealth of knowledge placed at his disposal by Tieffenthaler. Like Gaubil and D'Anville, he exercised all the acuteness of his intellect in determining the source of the Ganges from Chinese, Tatar, and Indian chronicles and records. Ritter placed no confidence in the oriental statements. He calls them ostensibly official, and yet in every respect, if not entirely false, at any rate only half true. Among these he reckons also the maps which Father Tieffenthaler sent to Europe from Hindustan. Therein Ritter is too severe. It is not difficult with the light of our present knowledge to interpret and understand the attempts made by the peoples of the East.

When the curious map sent by Tieffenthaler to Anquetilis is compared with a modern map of the Trans-Himalaya it must be admitted that the resemblance is very slight. The most singular feature is the hydrography. We see the Brahmaputra flowing out of Manasarowar on the east. How is that possible? Shah Akbar's envoys no doubt went round the lake. The Persian note on the map runs: "The great river which goes in the direction of the Punjab." If a Hindu had given the information the error would have been easier to understand, for he would have been influenced by religious prejudices and have been blinded by them. The Manasarowar was created from the soul of Brahma and the Brahmaputra is Brahma's son. But a Mohammedan wrote the Persian inscription. Possibly Hindus may have drawn the map and the writing was added by Mahommedans in India.

There is actually a river, which interrupts the regularity of the eastern shore line, but this river flows into the lake, not out of it. It is our old Tage-tsangpo, the source stream of the Sutlej, which debouches there. Perhaps the natives who are responsible for the map had simply

forgotten in which direction the water ran, and did not perpetrate the mistake until after their return to India.

The map gives no information about the river in the south-west. We may, therefore, consider it certain that it represents one of the rivers that descend from Gurla Mandatta to the lake. We may be the more certain of this because the map shows in the same neighbourhood a temple with hermits' cells, which is evidently the great monastery Tugu-gompa.

The river flowing out of the lake north-westwards especially attracts our attention. Here we have only to keep to the original genuine statement in Persian which says: "The great river Sutlej which goes in the direction of the Punjab." Whenever the map was drawn, the Sutlej then streamed out of the lake. But how is it that the draughtsman did not know that the river entered Rakas-tal? Probably because he had crossed it only at the shore of Manasarowar and had not troubled himself further about it. Owing to this neglect he has made two rivers run out of the lakes westward instead of one. For he saw that a river issued from the Rakas-tal, his Lanka Dhé, and thought that this river was the Sarju, Map-chu. He will have nothing to do with any water connection between the two lakes. Manasarowar belongs to the system of the Sutlej, Rakas-tal to that of the Ganges. If he had examined the isthmus between the two lakes, he would have found that his Sutlej flowed out of Manasarowar into Rakas-tal, and that the river draining the western lake was still "the great river Sutlej which goes in the direction of the Punjab."

Tieffenthaler's map conjures out of the mirror of Manasarowar a monstrous bifurcation, which, as unique on the earth's surface, really ought to have roused the suspicion of Anquetil du Perron—two gigantic rivers running out of the same lake, the Brahmaputra flowing eastwards, the Sutlej westwards.

At first sight the map of Eastern Asia seems more than

fanciful. After closer examination we detect its meaning. It shows that at the end of the sixteenth century, and perhaps before the time when Tieffenthaler sojourned in India, the two lakes were closely connected with the river system of the Sutlej, the upper course of the stream passing through both, and then continuing on its headlong path through the Himalayas, past Tirtapuri, Totling, and Kanam. In a recently published book, *Les Royaumes des Neiges*, Charles Eudes Bonin has instituted an excellent comparison of Tieffenthaler's map with my results.

In Chapter L. of the second volume of *Trans-Himalaya*, "The Source of the Sutlej," I have already given the notable contents of a Chinese work, *Shui-tao-ti-kang*, or *The Elements of Hydrography*, which was published in the year 1762. Therein the earliest wanderings of the river are depicted in a manner which agrees in details with the reality, and shows that the Chinese then also, as in the time of Kang Hi, were much better informed about those waterways than modern Europeans who had not been there, but thought that they could solve the problem out of their own heads. The Chinese text states in short decided sentences that the water of Lang-chuan-ka-pa-pu-shan, or the mountain Langchen-kabab, forms the lake Ma-piu-mu-ta-lai, or Manasarowar, and then adds: "The water (that is, the Sutlej) flows out from the west of the lake into the lake Lang-ka (Rakas-tal) at a distance of 60 li. The water (of lake Lang-ka) flows out from the west, and after running westwards for more than 100 li it turns to the south-west, and is now called the Lang-chu-ho." *Lang* signifies bull or elephant, and *chu* means water in Tibetan, while *ho* is the Chinese word for river.

When Major J. Rennell published in the year 1782 his fine map of Hindustan, in which southern Tibet appears in part, he had for this country no other material to guide him but D'Anville's map which had appeared fifty years earlier. He makes the Indus rise in the mountainous regions west of Kashgar, and the Sutlej descend from the

outhern flank of the Himalayas. But he lets the true upper Indus, which flows through Ladak, and the upper Sutlej, which runs past Totling, be captured by the basin of the Ganges. Rennell, however, confesses that he has made use of D'Anville's map only from want of better material, and he expresses a doubt whether the headwaters of the Ganges can extend so far north-westwards as they are shown on D'Anville's map. He considers it certain, however, that the Ganges and Brahmaputra rise on either side of the same ridge east of Manasarowar, and that after enormous detours—one to the west, the other to the east—they debouch into the sea at the same place.

Rennell was subjected to pretty sharp criticism, by Anquetil du Perron, for instance, who pointed out that he had shown the defectiveness of D'Anville's map in 1776, for the Gogra, and not the Ganges, rose in the same ridge in Tibet as the Brahmaputra. It was not discovered, however, until some fifty years later that both Rennell and Anquetil were wrong in their explanations of the maps of D'Anville and Tieffenthaler.

When, then, Rennell's map shows a watercourse between the two lakes and a river issuing from Rakas-tal on the west, which is called the Ganges, we recognize on the one hand the correct interpretation discovered by the lama topographers, and on the other the usual confusion of the Ganges with the Sutlej.

In the Anglo-Indian periodical *Asiatick Researches* for the year 1798, there is an article with the title, "An Account of Two Fakirs," published by a Mr. Duncan. In this also Manasarowar passes rapidly before our eyes.

One fakir, Purana Poori of Benares, held his folded hands above his head until his arms grew stiff in this unnatural position. He was an intelligent and trustworthy man, and narrated his adventures in 1792. On his wanderings through the world he had visited Balkh, Bukhara, Samarcand, Badakshan, and Kashmir. He had been at the Gangotri, the source of the Ganges, and had found

that the river at its origin was so narrow that a man might jump over it. From Khatmandu he had travelled into the interior of Tibet, to Lhasa and Shigatse. Thence he marched in eighty days to the lake " Maun Surwur."

Of this lake the fakir gave the following account :

Its circumference is of six days' journey, and around it are twenty or five-and-twenty *goumaris* (or religious stations or temples), and the habitations of the people called Dowki, whose dress is like that of the Thibetians. The Maun Surwur is one lake, but in the middle of it there arises, as it were, a partition wall, and the northern part is called Maun Surwur, and the southern Lunkadh or Lunkadeh. From the Maun Surwur part issues one river, and from the Lunkadh part two rivers. The first is called Bráhma, where Puresram making Tupieya, the Brahmaputra issued out, and took its course eastward ; and of the two streams that issue from the Lunkadh, one is called the Surju, being the same which flows by Ayóddjà or Oude ; and the other is called Sutrooda (or in the Puranas Shutudru, and vulgarly the Sutluje), which flows into the Punjaub country ; and two days' journey west from the Maun Surwur is the large town of Teree Ladác. . . . Proceeding from Ladác seven days' journey to the southward there is a mountain called Cailasa Cungri (Cungur meaning a peak), which is exceedingly lofty, and on its summit there is a Bhowjputr or Bhoojputr tree, from the root of which spouts or gushes a small stream, which the people say is the source of the Ganges, and that it comes from Vaicont'ha or heaven, as is also related in the Puranas.

It is not said when the fakir travelled to the lake ; perhaps ten years before he recounted his observations, perhaps even twenty. At any rate his memory played him false. He has confused Kailas with a mountain of the same name lying more to the south. Like Tieffenthaler's informants, he makes the Brahmaputra begin at Manasarowar. The only accurate detail he has given is the outflow of the Sutlej from the Langak-tso. Though he made the circuit of Manasarowar, which is prescribed to pilgrims, it never occurred to him that the Sutlej runs out of this lake. The origin of the Sarju river is a reminder

of Tieffenthaler's map, and the spelling of the names is also similar.

The other fakir had nothing to tell of the complicated waterways. He only noticed that four countries met at Maun Talai (Manasarowar), namely, China, the "Lama Land," Beshahr, and Kulu.

Year after year pilgrims have wandered round the lake for the purification of their souls and in hopes of attaining to the paradise of Brahma and the heaven of Siva. But they have taken their experiences with them when they entered on the dark road beyond the pyre on the quay at Benares, and their knowledge has vanished in the ocean of oblivion just as thoroughly as their ashes have been borne down by the eddies of the Ganges to the Bay of Bengal, and been there lost in the briny deep. Oh, if we possessed a chronicle of all that they have seen every year for many centuries! They have trodden out paths on the margin of the shore with their pious feet. For thousands of years Siva's guests have performed the round dance which was to lead them to an imaginary heaven. If only one devotee each year had recorded what he saw on a stone tablet in a pagoda!

Some of them have seen the Sutlej come forth from Manasarowar, and to get over the river have crossed the bridge which stood just below the Chiu monastery and was restored from time to time. It still stands there, and old water-marks may be seen on the conglomerate blocks of the bridge-heads. Others have seen a miserable thread of water trickling down the bed, while others again have found not a drop in the channel and have crossed dry-shod.

If we knew now what was known to those wanderers of the age when the first pilgrim made his round of the lake, we could draw a curve of the periodic rise and fall of the lake level. We should see how the lake rose after rainy summers, and how it fell in years of drought. The effect of the monsoon on the highlands would be apparent, and we should perceive that the lake created from the soul

of Brahma is living, and that its pulse beats in rhythmical periodic time in obedience to the unknown laws of heaven. But the pilgrims have not revealed their secrets, and nothing remains for us but to search out and collect the notes made by a small number of travellers.

CHAPTER XVIII

THE FIRST ENGLISHMEN AT THE HOLY LAKE

CAPTAIN F. WILFORD, in his "Essay on the Sacred Isles in the West," which appeared in 1808, has communicated what he heard from the famous Purangir, a man who was repeatedly employed by Warren Hastings as interpreter and spy in Bhutan and Tibet, accompanied Bogle and Turner on their journey, and in the year 1779 the Tashi Lama on his march to Pekin. Purangir was a Brahmin, and had made the pilgrimage to Manasarowar, probably shortly before 1773. During his visit there he heard that the lake was wont to overflow during the rainy season, and that the channel then carried water, but failed during the dry season. It should be noted that the surface of the lake rises and falls every year, but that the bed remains dry in some years even during the rainy season.

Purangir believed that the Ganges had its source on Kailas, and flowed thence to Manasarowar. He describes the circle of mountains; he says correctly that the lake has the form of an irregular oval approaching to a circle; he took five whole days to walk round it, and on the south bank he visited the principal temple, the present Tugu-gompa. "The Ganges issues from it (the lake), and during the dry season its stream is hardly five or six inches deep. It does not go through the lake called Lanken in the maps; it flows to the south-east of it at the distance of two or three *coss*."

Here we have, then, a notice that the water about the year 1770 issued from Manasarowar even during the

dry season, and, as usual, we have the name Ganges put in the place of Sutlej. Purangir denies that the river runs through Rakas-tal. But of this he knows no more than other pilgrims. They never turned their steps towards the other lake. It is not holy, and is not touched by the pilgrim route. Purangir, therefore, did not see for himself in which direction the false Ganges flowed, and he did not know that the river by which he stood certainly does not take the way to Benares, but cuts its bed through the Himalayas to make for the Indus.

Wilford makes some bold statements, and perhaps these caused Klaproth to write such a biting criticism of the work. For Wilford says that Pliny and Ctesias mentioned the lake, and Marco Polo described it, whereas their writings contain not a word about Manasarowar.

How dangerous it is to attempt to draw geographical conclusions from religious errors and articles of faith may be seen from the statement of Wilford, that "the four sacred rivers, springing from the Mánsarovara, according to the divines of Tibet, are the Brahmá-putra, the Ganges, the Indus and the Sitá. The Ganges is the only one that really issues from that lake, and if the three others do, it must be through subterranean channels; and such communications, whether real or imaginary, are very common in the Puránas." The four rivers which the Tibetans connect with the holy lake are those which gush forth from the mouths of the lion, the elephant, the horse, and the peacock. But the Ganges, from the head of the sacred cow, is not among them. The fourth is the Gogra or Map-chu, the Peacock river. The nomads, who are less imbued with Lamaistic ideas, say quite plainly that only the Sutlej flows out of the lake, and this only at times.

D'Anville's map shines like a lighthouse over Tibet. Some parts of it have been proved incorrect by later English explorations, and therefore its authority has been undermined. Other regions were for nearly a hundred years accepted as represented. The rest was, as we have seen,

rejected only in the second half of the nineteenth century. The most remarkable feature in D'Anville's map is the indication that the Ganges issues from Manasarowar; this was a burning question a hundred years ago. In the year 1812 H. T. Colebrooke published an article "On the Sources of the Ganges in the Himádri or Emodus." As we have had so many false data on this subject, it may not be amiss to consider the discovery of the Ganges source.

Colebrooke had great doubts as to the accuracy of the statement made by Kang Hi's lamas. Hindu pilgrims were wont to follow the Ganges up to the foot of the snowy mountains, while Kang Hi's lamas advanced to the lakes and Kailas in the west. Between these terminal points rise the mighty Himalayas, and it is impossible to determine from their southern side the courses of rivers in the north.

If geographers had been asked in the year 1906 to point out on a large-scale map of western Tibet the source of the Brahmaputra, they would have been considerably perplexed, and each would have laid his finger on a different place. Even those who knew Ryder's results would have given undecided answers. No one, not even Ryder himself, could have placed the point of the compasses on a particular point and said "Here." The position of the Sutlej source would have been fixed with still greater uncertainty, and only those who knew the records would have answered that the question had not yet been decided. The source of the Indus might have been located within a narrower circle, though its radius would have measured twenty miles; but no European had tried to reach it, and Montgomerie's pundits had been obliged to turn back when they were still several days' journey from the source.

At last in the year 1907 I succeeded in finding my way to the sources of all three rivers. I succeeded because I was determined to find them, and because I did not give myself up to chance like chaff driven before the wind. In the case of the Brahmaputra and Indus I followed the streams upwards, which is the surest method. In the case

of the Sutlej I followed the river down from its source, and not until I had collected all my data could I prove that the end of the Ganglung glacier, from which the Tage-tsangpo flows, is the source of the Sutlej.

A hundred years earlier the question of the Ganges source was much more vague. It is, of course, owing to the difficulties always placed in the way of Europeans by the Tibetans, and the aversion of the Indian Government to any complications on the frontier, that Englishmen have not long ago penetrated into the country and discovered the sources of the Brahmaputra, Indus, and Sutlej. My success was due to the respect towards Europeans with which Younghusband's expedition inspired the Tibetans, and also to the fact that I received no instructions from the Indian Government. The source of the Ganges was discovered in 1808, those of the other three rivers in 1907. On the former event Colebrooke says :

> Perhaps the national credit was concerned not to leave in uncertainty and doubt a question which the English only have the best opportunity of solving, and one at the same time interesting, as that of exploring the springs of one of the greatest rivers of the old continent, and whose waters fertilize and enrich the British territories which it traverses in its whole navigable extent.

The expedition was accomplished by Lieutenant Webb and the Captains Raper and Hearsey. It followed the track of Antonio de Andrade. Two hundred years earlier this traveller on his way over the Mana pass to Tsaparang had, without knowing it, passed by the source of the Ganges. The sources of the Indus, Sutlej, and Brahmaputra neither Catholic missionaries nor any one else had passed before the year 1907.

The instructions given to Lieutenant Webb by the Supreme Government of Bengal contain the following paragraph :

> To ascertain whether this (*i.e.* the cascade or subterraneous passage at Gangotri) be the ultimate source of the Ganges ; and

in case it should prove otherwise, to trace the river, by survey, as far towards its genuine source as possible. To learn, in particular, whether, as stated by Major Rennell, it arise from the lake Manasarobar; and, should evidence be obtained confirming his account, to get, as nearly as practicable, the bearing and distance of that lake.

Webb accomplished his task, and reported that the Ganges rose on the southern slope of the Himalayas and that, as trustworthy natives had informed him, " no river, except one, exists westwards of the Manasarowar lake; that this river is called the Saturaj (Satalaj) river."

Captain Raper has given an excellent description of that important journey. Gangotri was the source of the Ganges. The problem of a connection between the Ganges and Manasarowar was finally settled. But which river was that which had figured so long between the lakes and to the west of Rakas-tal? This question had yet to be answered.

On a later occasion, in the year 1816, Webb learned from a Tibetan border chief that more than a hundred streams poured into Manasarowar, but that the lake had only one outlet to the Rakas-tal, a channel which, however, was often dry.

William Moorcroft was a veterinary surgeon who in 1808 went to Calcutta at the invitation of the directors of the East India Company. His name is famous in connection with Manasarowar, and his narrative of the journey he undertook with Captain Hearsey in 1812 to the north-western shore of that lake, is some of the best literature we have on the holy lake. But his hydrographical results were negative. Thus Colebrooke says in his introduction to Moorcroft's narrative: " He ascertained the existence and approximately determined the situation of Mánasarôvara, verifying at the same time the fact that it gives origin neither to the Ganges nor to any other of the rivers reported to flow from it." Colebrooke, however, adds the suggestion that the lake when it rises sufficiently may discharge its surplus water to Rakas-tal, from which the Sutlej originates.

Moorcroft travelled over the heights of the Himalayas. At the sight of the huge snow-clad mountains he could not understand why people had not been content to ascribe the Ganges to them, but insisted on bringing the river out of a lake, which also must be constantly fed by rivulets. This truth has been forgotten by some learned men of our days. It is not enough to say that Manasarowar is the source of the Sutlej. The largest of the streams that feed the lake is the uppermost course of the Sutlej. And as the Tage-tsangpo is very much larger than all the rest, there can be no doubt where the real source lies.

They gained Tibet over the Niti pass (17,568 feet). The pass was so high that a handful of resolute men could have held it against a whole army by rolling down large blocks of stone. The two Englishmen travelled in disguise and gave themselves out for merchants. They got safely past Daba and came to Gartok. The Garpun had no objection to their extending their journey to Manasarowar. But when Moorcroft asked to be allowed to make the journey back over some other pass than the Niti, the answer was "No," for the Garpun would lose his head if the strangers did not go back by the same way they had come—just as at the present day.

Moorcroft proceeded south-eastwards and found at the foot of the rock on which the Tirtapuri cloister is built "a very rapid stream, which is said to proceed from a lake at the foot of the Himálaya, called Ráwanhrád (Rakas-tal), and to constitute the principal branch of the Satúdrá." We will not do more than mention that the words in the text do not agree with Moorcroft's map. Worthy of notice is the circumstance that, according to the statement of the lamas of Tirtapuri, the Sutlej came from Rakas-tal, though the channel between the two lakes was dry, and therefore no water could flow out of the western lake unless through subterranean passages. Hence it seems that the monks trace back the Sutlej to Rakas-tal, in spite of climatic variations which cause the water to fail periodically.

After two more days' journey Moorcroft descried to the south " a large sheet of remarkably blue water at the foot of the mountains to the right, called Ráwanhrád, said to give rise to the principal branch of the Satúdrá, and to communicate by a river with the lake Mansarowar, named by the natives Mapang." Moorcroft therefore approached the holy lake with the conviction that the water ran through both lakes. That the Ganges does not receive a drop of water from this direction had already been proved by Webb's expedition. Now Moorcroft had to find out how matters stood with regard to the Sutlej.

On August 6, 1812, Moorcroft walked along the shore of Manasarowar to Chiu-gompa, and mounted a hill on its southern side. He looked in vain for an outlet. As far as the eye could perceive through the field-glass there was no depression between the two lakes, no interruptions in the hills. He sent scouts to the southern shore, and they returned with the news that no drainage stream issued from the lake.

He returned to his camp convinced that no rivers flowed out of Manasarowar. And yet on his walk near Chiu-gompa he had twice crossed the dry bed without remarking that it might at times at any rate serve as an outlet. The next day he again sent men off along the western shore to confirm his observations. When they returned they assured him that they had not even found a sign of any old dried-up bed.

An old pundit named Harballabh, who was Moorcroft's companion on this journey, assured him before they reached the lake that a watercourse issued from Manasarowar, entered the Rakas-tal, and left it again on the western shore as the Sutlej. Harballabh was vexed at the result of the investigation, for it seemed to cast an aspersion on his credibility. He affirmed with great positiveness that sixteen years before, that is in 1796, he could not have crossed the channel between the eastern and western lakes if there had not been a bridge below Chiu-gompa. Also a

man from Ladak told how, eight years before, or in 1804, he had seen the stream flowing out of the lake, which had subsequently ceased to run, and that then the bed had dried up and been filled with sand.

Again Moorcroft sent out scouts who returned with the same negative result. After all he could only explain the phenomenon by supposing that an earthquake had produced alterations in the ground. And yet the explanation was not far to seek! That stream had only a periodical existence, depending on variations in the rainfall which, sometimes abundant, sometimes slight, was carried up by clouds of the south-west monsoon into the mountains.

Moorcroft thought he saw in the distance a stream issuing from the western shore of Rakas-tal; but, unfortunately, an attack of fever prevented him from examining it more closely. As regards this he must have relied on the statements of the natives, for it is beyond doubt that the channel from the Rakas-tal was dried up in the year 1812.

After Moorcroft had solved the problem of the lakes and the mysterious river, as he supposed, he took his way back through Daba and over the Niti pass, and rejoiced when he saw the first trees on the south side of the Himalayas. In Kumaon the strangers awakened suspicion by clothing themselves again in European costume, and in consequence of orders from Khatmandu, the capital of Nepal, they were imprisoned with great brutality. Moorcroft, however, by his courage and energetic conduct succeeded after a time in regaining his freedom, and in November 1812 the whole expedition reached British territory in safety.

A singular fate seems to have pursued this, the first Englishman to reach the holy lake. After his famous and meritorious journey thither, he directed his eyes from the shore yet farther into the heart of Asia, on to that world of unknown mountains, which, since the time of Marco Polo and Benedict Goes unknown and unvisited, form a partition between the countries of India and the focus of the immense

empire once ruled by the iron hand of the victorious Timur. In the year 1820 we find Moorcroft in Leh, but having waited there for two years without finding an opportunity of travelling northwards he returned to Kashmir and the Punjab in order to make for Bukhara through Cabul and by unknown roads. On his return thence he died of fever at Andkhoi, on the 4th or 5th of August 1825, it was said, but as his countryman Trebeck and his Asiatic fellow-travellers all perished, there is every reason to suppose that they were the victims of a hostile attack. It is the more probable that such was the case because the expedition was received with hostility by the people and princes in Timur's country. Moorcroft was the first to die; there is a letter in Trebeck's handwriting still extant which confirms his death.

It therefore excited no little astonishment when Father Huc related in his noted work, *Souvenirs d'un voyage dans la Tartarie, le Thibet et la Chine*, which appeared in 1853, that during his stay in Lhasa he was one day visited by the chief of the Kashmirian merchants, who introduced to him one of his subordinates named Risan, and told him that the man had served Moorcroft for many years during his sojourn in Lhasa.

Huc had never heard anything of Moorcroft, and now he was assured on all sides that the English traveller had arrived at the capital of the Dalai Lama in 1826. He had come from Ladak, was dressed as a Mohammedan, and spoke Persian only. He had hired a house and lived in it twelve years with his servant Risan. Herds of yaks and goats which he bought were tended by Tibetan herdsmen on the mountains, and under the pretence of keeping an eye on them he had been able to wander about unmolested in the mountainous regions, making notes and drawing maps. After the twelve years had passed the stranger had given Risan a letter, and told him that he would make his fortune if he showed it in Calcutta. Then he left Lhasa by the road to Ladak which passes by Manasarowar, so

excellently described by him. Near the lake he was attacked by robbers and murdered.

By order of the Tibetan Government the robbers were pursued and overpowered. The property of the dead man was brought to Lhasa, and there the geographical maps, the notes, and the instruments revealed that the supposed Kashmiri was an Englishman.

Huc tried in vain to clear up the mystery, for after his return to France he learned that in Ritter's *Asien* Moorcroft's death in Bukhara in 1825 was announced. The same statement was made in Professor Wilson's book on Moorcroft published in 1841. Lieutenant Burnes on his journey to Bukhara in 1832 had visited his grave.

Perceval Landon, correspondent of the *Times* with the expedition of Younghusband to Lhasa, suggests that Moorcroft's papers were carried after his death in Bukhara by Kashmiris to Lhasa, and that their owner was afterwards murdered or plundered at the holy lake on his journey home. The supposed Moorcroft was, then, a man from Kashmir. This is perhaps the true explanation. But Huc spoke himself with the man who had served the stranger for twelve years, and he justly asks what reason the inhabitants of Lhasa, Tibetans and Kashmiris, could have for imposing on him with such anecdotes. At any rate Moorcroft's fate is involved in darkness. According to the former version he died alone in Bukhara in 1825, according to the other he was killed in 1838 near Manasarowar.

Among the names connected with Manasarowar, Moorcroft occupies the first place. He, indeed, visited only the western shore, but I have realized on the spot how accurate and reliable his observations were. His countrymen have not always estimated him highly enough. Various attempts have been made to explain on more or less probable grounds why he did not see the river bed near Chiu-gompa. It is, however, by no means extraordinary if this bed is so sanded up as to be unrecognizable after the water in the lake

has stood for several years at a low level. Moorcroft's omission was that, owing to fever, he did not go a few hundred yards beyond the monastery Chiu-gompa; then the circumstances would have been clear at once. If Harballabh and the Ladaki, whose words he could not make up his mind to trust, had only led him to the bridge, he would have admitted that abundant floods must at times pass under its beams.

Three years after Moorcroft's journey to Manasarowar, his countryman, James B. Fraser, reached the Jumnotri, the source of the Jumna, and availed himself of the opportunity to gather information about the country in which the Sutlej collects its first drops of water. The natives could only inform him that the river came from a great distance and had its source behind the Himalayan chain. They knew nothing more definite. He himself believed that the river was fed chiefly by melted snow from the mountains, which lifted their white summits on all sides. The narrative of this journey appeared two years after Moorcroft's. But the author does not know the work of his countryman, and seems hardly to have heard of the first Englishman who crossed the western Himalayas. Or he would have said a word or two about the map printed two years before, which shows Rakas-tal as the source of the Sutlej.

In the years 1817 and 1818 the brothers, Captain Gerard and Doctor Gerard, travelled through the western Himalayas and made valuable contributions to our knowledge of those mountains. They did not, indeed, advance as far as our lake, but they obtained information about it from natives. Captain Gerard states:

> I have seen more than one hundred people who have travelled up the Sutluj, not exactly to its source, but to within ten or twelve miles of it, to the place whence the road turns off to Mansurowur. All the accounts agree that the largest stream issues from the western corner of Rawun Rudd (Rakas-tal), or Langa, and, even close to that lake, it is stated to be

thirty feet broad and one-and-a-quarter deep, in the dry season, and very rapid.

From this report we may conclude that the precipitation increased from 1812 to 1817, and then reached a maximum which allowed both lakes to overflow. This conclusion, however, is afterwards contradicted in Captain Gerard's report, wherein it is said that the natives affirmed most positively that the Manasarowar had about twenty years before sent out a stream westwards, which had to be crossed by a bridge, but that it had subsequently failed. But the monks living on the shore believed that the outflow still continued, though by subterranean passages.

Especially interesting is Gerard's remark, that a river flowing into Manasarowar on the east is known to the natives as the Sutlej, and that it comes from the Gunchu-tso. But here he misunderstood his informant, for the river which comes from the direction of the Gunchu-tso is the Samo-tsangpo, while that which must be regarded as the uppermost course of the Sutlej is the Tage-tsangpo. The Gunchu-tso has no outlet; the lake is salt and it is scarcely credible that it had an outlet to Manasarowar a hundred years ago.

Another of the great pioneers in the western Himalayas was Captain J. D. Herbert, who travelled along the Sutlej in 1819 and drew up a map of the part of the river which lies in British territory. He was unable to advance beyond the frontier village Shipki. Like the Gerard brothers he was forced to turn back at the Tibetan boundary. The suspicion of the authorities seems to have been aroused after Moorcroft's visit; even natives were often refused permission to cross the frontier, for it was feared that they might be disguised Europeans. Therefore Herbert could do nothing towards solving the problem, but like the Gerard brothers had to content himself with questioning natives; they informed him that a connection existed between the two lakes during the rainy season.

We often wonder at the absence of Moorcroft's name in descriptions of Himalayan journeys of this period, though he was the first authority on the country round the lakes. We wonder why natives of more or less credibility were subjected to a cross-examination when an Englishman had shortly before given such an exact and detailed account of the origin of the Sutlej and its upper course. It is the same with Francis Hamilton, who set out in 1814 and gave to the world his excellent book *An Account of the Kingdom of Nepal in 1819*. He has included a quantity of contradictory statements he received from a certain Hariballabh, in whom we have every reason for recognizing Moorcroft's old pundit Harballabh. The pundit affirmed that a river flowed out of each of the lakes, and Hamilton considers that this statement agrees on the whole with D'Anville's map. Why did he not consult Moorcroft's map, which was much newer and was the work of an Englishman ?

During the thirty-four years which intervened between Moorcroft's first journey and Henry Strachey's visit to Manasarowar hardly any information on western Tibet reached Europe. Students certainly spoke now and then of the holy lake, and slight allusions were made to it in geographical literature. Minkhul Khutuktu wrote his description of Tibet, which, however, was not translated into Russian until much later, and in which the courses of the four famous rivers are fancifully drawn.

Meanwhile the discovery of the source of the Sutlej gave rise to a dispute as to priority in the *Journal Asiatique*. The great geographers Saint-Martin and Klaproth believed that they could prove that Tieffenthaler and Anquetil du Perron had solved the problem in 1784, or twenty-eight years before Moorcroft's journey, and that therefore the honour of the discovery was due to the Germans and French and not to the English. It was clearly shown on Tieffenthaler's map, they maintained, that Manasarowar was the source of the Sutlej. " From this lake flows the river Langtchou or Sutledj, which runs westwards to cross the

Langa lake, which the Hindus call Ravanhrad. Accordingly, there exists a connection between the two lakes, which Moorcroft has disputed without reasons and proofs; the farthest source of the Sutledj is in the lake Manasarowar, and not in Ravanhrad." Therefore, the two learned men think that it is time that the credit of the discovery should be assigned to the Germans and French, to whom it is justly due.

It is the old story, but remains ever new. Ritter had already said that a single observation on the spot was worth all the cheap hypotheses that can be manufactured at home. Here we have on the one side sound unpretentious personal observations, and on the other, theoretical speculations of doubtful value. First of all, Kang Hi's lama topographers long ago had surveyed the lakes, and proved their close hydrographical connection with a river which was the Sutlej, though they mistook it for the Ganges. To them, then, belongs the honour of the first discovery, though it was reserved for Moorcroft to prove that the river was the Sutlej. It was reprehensible that two men like Saint-Martin and Klaproth should put the authority of their famous names in the scale against Moorcroft, and throw a cloud over a discovery which was worth a hundred times as much as all that Tieffenthaler and Anquetil du Perron had written on Manasarowar. Ritter alone defended Moorcroft as the "only eye-witness," and he expressed briefly the sharp-sighted suspicion that the outflow of the lake might be periodical. He could appreciate all the troubles and dangers to which the native topographers were exposed and the risk Moorcroft ran in travelling in disguise when he made his discoveries. How easy and safe it was, on the other hand, for a man to sit at his writing-table and in categorical statements hurl his thunderbolts at the real discoverers who had seen lands, rivers, and lakes, and cite against them authorities who had never crossed the bounds of Tibet!

Lieutenant J. D. Cunningham, who wrote in 1844,

collected the most recent data concerning the lakes, and supplemented them by reports he received himself from natives. He arrived at the conclusion that, if a water channel had ever connected the two lakes, it no longer existed, and that no stream still flowed out of Rakas-tal.

Shortly after, in the autumn of 1846, Henry Strachey accomplished his well-known journey to the frequently discussed lake district, turning his steps first to Rakas-tal, which was less known, and which seemed to him more interesting, because the Sutlej ran out of its north-western corner. His examination convinced him that no visible watercourse left the lake, and that the only outlet he could find was through the permeable ground. But he did not deny that abundant precipitation might raise the surface of the lakes to such a degree that the surplus water might flow away through the bed still visible in the north-west. He also puts the question whether the Darma-yankti, a tributary coming from the south and joining the Sutlej of Tirtapuri, may not be the true source of the Sutlej. The decision, however, he left for exact measurements. Undoubtedly the Darma-yankti carries at certain times more water than the branch of Tirtapuri. But if we are to move the source from one point to another according to the volume of either stream, we may as well give up the problem as insolvable. Reckoned from the source of the Tage-tsangpo the Tirtapuri branch is the longest. But the decisive point of view is that of the Tibetans and Chinese, that the two lakes lie on the Sutlej source stream like pearls on a string. When Rakas-tal is finally cut off from the Sutlej, and its water begins to turn salt, then must the two lakes be regarded as an isolated hydrographic system.

Then follows the surprising discovery which Strachey made on October 5 when he had left the north-eastern bight of Rakàs-tal behind him and was marching eastward. Only a mile from the lake shore he came across " a large stream 100 feet wide and 3 deep, running rapidly from east

to west through a well-defined channel; this was the outlet of Manasarowar."

Thereby Henry Strachey proved that the account given by Kang Hi's lamas was correct. Only Moorcroft could have seen the channel, and again a shadow of doubt was cast upon his efforts. Strachey endeavours to explain the matter by supposing that the discharged water broke through a shore bank of sand and gravel and was hidden by it, and that it did not collect into a stream until it emerged on the other side of this bank. For otherwise Moorcroft must have noticed it.

Yet never did the essence of the problem stand out so clearly as now. Some years the channel contained water, in others it was dry. Its water was therefore a periodical appearance, and Moorcroft had made his observations as surely as the envoys of Kang Hi, or as Henry Strachey, though he visited these regions at a time when the monsoon rains were scanty and caused a low level of water in the lakes.

Two years later, in the autumn of 1848, Henry Strachey's brother Richard succeeded in making his way to the forbidden lakes. He passed along the southern shores of Rakas-tal and marched northwards on the isthmus between this lake and Manasarowar until he reached a rise near Chiu-gompa, from which he looked down on the stream which connected Manasarowar with Rakas-tal. Then also the eastern lake had an outlet to its western neighbour.

CHAPTER XIX

THE LATEST REPORTS

DURING the twenty years which passed between the journeys of the Strachey brothers and the departure of Montgomerie's pundits, we search in vain for any valuable information about the disputed country which the inaccessible walls of the Himalayas so effectually protected. I find only that a Mr. Drummond, Commissioner of Bareilly, sailed in a boat on the holy lake in the year 1855, or according to other accounts in 1860, but I have obtained no information as to what his aim was on this journey, or what he accomplished.

In his classic account of Ladak Sir Alexander Cunningham relies on the experiences of the brothers Strachey, and rightly says that the true sources of the Sutlej must be sought among the streams which flow into Manasarowar from the east. It is remarkable that then no European had visited the eastern shore and that nothing was known of the waters that debouched there. The source of the Indus, on the other hand, he misplaced into a quite absurd spot, believing that Moorcroft had discovered it and had seen the water of the Indus flow north-westwards past Gartok to Ladak. He knows nothing of the north-eastern arm which descends from the true source.

The legend of the four beasts' mouths, from which the famous rivers rise, is, according to Cunningham, of Indian origin. The Tibetans could not know of the elephant and peacock except from there. And the Tsangpo, the river of the horse's mouth, is so named in honour of Buddha's

steed. The name Singi-kamba, the Indus, refers rather to the tiger than the lion.

On their long and meritorious journeys through the western Himalayas during the years 1855 to 1857, the Schlagintweit brothers did not succeed in advancing to our lakes. They had, like Cunningham, to content themselves with quoting Strachey, and spoke therefore of a river which connected the two lakes throughout the year.

There is also no lack of apocryphal accounts. In June 1865 Captain H. R. Smith and A. W. Harrison reached the village Darchen at the southern foot of Kailas, and also marched along the northern shores of both lakes. They traversed the mountains for sport, and not much can be expected from their powers of observation. It would have been wiser, therefore, if Captain Smith had forborne to criticize the Strachey brothers, the most thorough and reliable explorers who had then travelled in Tibet. Smith actually asserts that it is a physical impossibility that water should flow to the Sutlej from one or both of the lakes, for in that case it would have to flow up a steep hill. He also disputes the existence of any trace of an old river bed. Every native he questioned confirmed his own observations, and, besides, he had found the circumstances so easily comprehensible that all inquiries were superfluous. At the meeting of the London Geographical Society, when the Captain gave an account of his astonishing discoveries in the Himalayas, the Himalayan explorer Dr. Thomson was present, and he effectively defended the honour of the brothers Strachey.

Captain A. Bennett advanced the same year to Daba, and added his contribution to the solution of the problem in the naïve and superficial opinion on the sources of the Sutlej and Indus that both rivers rise here, the former in some lakes, the latter in the hills behind them.

At the same time as the last-mentioned, Thomas W. Webber and three other Englishmen travelled to the country south-east of the holy lake to hunt there. Webber

describes the journey in a book which appeared in 1902, nearly forty years after the journey. Therein he reports the curious discoveries made by himself and his companions, discoveries which quite overthrew all that Moorcroft, the brothers Strachey, and the pundits had achieved. The pundits certainly travelled two years after Webber, whose book takes no notice of their experiences.

Webber believed himself to be in the higher regions of the Brahmaputra when a very surprising change of scene occurred:

> On another occasion we crossed another very lofty divide, and found ourselves suddenly out on the northern slopes of another watershed, none other than that of the mighty Indus. Far beneath us, some miles away, lay the most brilliantly beautiful blue sea, the celebrated Manasarowar lake, as it proved, which we had promised not to approach.

It is hopeless to try to reduce this confusion to order. They stand on a watershed between the Brahmaputra and Indus and see Manasarowar a mile in front of them! On a map Webber has placed the source of the Indus south of Manasarowar and the source of the Ganges on the southern flank of Gurla Mandatta. On the east side of the same mountain rises the Brahmaputra. It is inconceivable how such a map could have been printed in England and in the year 1902. Kang Hi's lamas confused the Sutlej with the Ganges, and that was pardonable. And so it was in Desideri's case. But the source of the Ganges had been known for nearly a hundred years in 1902, and for as long a time it was known that the stream flowing out of the lakes was the Sutlej, and not the Indus. When Webber's book appeared all these facts were known, but he has erased them with one stroke of the pen. Of Gurla Mandatta he says: "This conspicuous mountain might appropriately be called the Peak of Asia, as from its glaciers the three great rivers, Indus, Ganges, and Brahmaputra, take their rise." The Ganges and the Brahmaputra have nothing whatever to do with Gurla. The source of the Indus lies to the

north, beyond the Trans-Himalaya. The Sutlej is certainly an affluent of the Indus, but its sources do not lie on the slopes of Gurla. The whole account is a romance—a phantom picture from the time of the Jesuits and Capuchins.

On his noted journey in the years 1885 and 1886 along the Tsangpo, the upper Brahmaputra, Nain Sing passed both lakes on the northern side. Montgomerie, who sent him out, led astray by Nain Sing's route, thought that the position of the Brahmaputra's source might be fixed in the mountains to the east of the lakes. It is, then, astonishing to hear two such famous presidents of the London Geographical Society as Murchison and Rawlinson say that the pundits returned along the bank of the Brahmaputra to the source of this river in Manasarowar. This was really to return to Father Tieffenthaler's view, and to ignore one of the most important watersheds in all Asia.

We have a reliable statement from the year 1868 by one of Montgomerie's pundits, who walked round Manasarowar without finding any outlet. But it is added that "at one point on the west the ground near the Ju monastery was low and looked as if water had perhaps at one time flowed through towards the Rakas-tal lake, though it is now too much above the lake to admit of it." Twenty years earlier, when the brothers Strachey visited the lake, water was still flowing out. Now the channel was dry. There is, then, a periodical depression, a fall in the curve.

Spirits dwell in the sacred mountains of Tibet, and it almost seems as if the Europeans who wandered along the foot of the steep rocky cliffs were blinded and stupefied by the magic power of the spirits and forgot to solve the problems for the sake of which they made such great efforts. Such was the case with the Nien-chen-tang-la, which several Europeans saw, and yet always remained a gigantic mark of inquiry on the shore of its holy lake.

A similar enchantment has bewitched Manasarowar and

Rakas-tal. Now there are four great rivers, which, each on its side, draw water from this inexhaustible reservoir; now it is the Ganges which rises there, then again the Indus, the Sutlej, the Map-chu, and the Brahmaputra, which are accused of exacting toll from the beneficent waves of the lake. And then dim rumours crop up that it is a physical impossibility that a single drop of water can escape from the margin of the lake basin.

Yet in the year 1891 Colonel Tanner, who knew the Himalayas thoroughly, wrote: "I here remark that the moot question as to whether the Satlaj actually comes from the Mansorawar lake or not, does not appear to have been definitely settled."

The extraordinary Münchhausen romance which an English newspaper writer named Landor narrated, and which quite set aside all the conscientious reliable descriptions of Moorcroft, Strachey, and the pundits, had no effect whatever. Among the uncritical, sensation-loving public Landor had a certain temporary success; but among geographers, especially in London, he was received with justifiable suspicion.

The Japanese priest, Ekai Kawaguchi, who travelled through India and Tibet in the years 1897 to 1903, caused less sensation. He makes some very valuable observations, but also commits some dreadful mistakes. He has no high opinion of the sharp-sightedness of Europeans. He himself is honest and ingenuous, and does his best to find out the truth. His mission was not geographical; he wished only to study religious literature and compare the Chinese translation of the Buddhist books with the Tibetan.

From Khatmandu and Muktinath Kawaguchi proceeded to Tibet, crossed the streams which form the Tsangpo, and travelled in a north-westerly direction to Manasarowar. He drew no maps, and his compass bearings are often absurd. Consequently, one is frequently uncertain which rivers and mountains he really refers to.

But when he follows a river for four miles and then sees it debouch into the south-eastern part of Manasarowar, this can only be the Tage-tsangpo. He calls the source of this river the "Chumik Ganga, or the source of the Ganges," and he adds: "I took a deep drink of the holy water." Of this and another spring he says: "Hindus and Tibetans consider these two sources to be the origin of the sacred Ganges, and regard them with religious awe."

Here, then, the Ganges again crops up among our lakes. Nevertheless, Kawaguchi's narrative possesses a certain interest. His two springs are probably identical with those I passed on the course of the Tage-tsangpo. He calls the first Chumik Ganga; Chumik is Tibetan, and signifies spring, while Ganga is the Indian name of the Ganges. When I asked the name of the spring I was told that the brook is the Langchen-kamba or the Sutlej river; the Langchen-kabab, the source of the Sutlej, lies a little farther south-east. But the channel between Manasarowar and Rakas-tal was named to me the Ganga. This appears to imply that the connecting channel is regarded as a continuation of the Tage-tsangpo, a view which is quite correct, and agrees both with D'Anville's map and the Chinese description in the work *The Elements of Hydrography*. Kawaguchi is a Buddhist priest, and perhaps religious dogmas obscured his judgment. It is not easy to sound the soul of a Buddhist priest. It is credible that his informant saw in the Sutlej a tributary of the Ganges, and that consequently, in his opinion, the source of the Sutlej might be described as that of the Ganges. But such speculations are unnecessary, for a little later in his narrative Kawaguchi himself declares that the Gogra, Sutlej, Indus, and Brahmaputra are all said to flow out of the lake, leaving out the Ganges, though it was the only river of which he had drunk water at the holy source. He adds, quite correctly, that the origins of these four rivers must be sought for in the neighbouring mountains and not in the lake. And he says that only "the source of the Brahmaputra has hitherto

defied exploration." In reality he had no notion where the sources of these rivers are. Who could expect a Buddhist pilgrim to be acquainted with the geographical literature of Europe?

Kawaguchi, with the greatest assurance, gives the circumference of Manasarowar as 200 miles, though actually it is only 45. He also boldly finds fault with the form given by Europeans to the lake on maps, and ascertained himself that its outline was that of a lotus. *Ad maiorem Dei gloriam!*

In connection with the water communication he made a still more remarkable discovery. He walked out from Tugu-gompa on to the isthmus, and from its hills he could overlook Rakas-tal.

> A mountain of about two and a half miles in circumference rises like a partition between the two lakes, and where this mountain dips down to a trough it seems as though there was there a connecting channel between the two lakes. I found, however, that no such channel really exists, but instead I discovered that Rakas-tal lies higher than Manasarowar. I was afterwards told that the waters of the two lakes really mingle every ten to fifteen years, after extraordinarily violent deluges of rain, and that on those occasions Rakas-tal discharges its water into Manasarowar. Hence arises the Tibetan saying that the bridegroom Rakas-tal visits the bride Manasarowar every fifteen years.

Here we have in addition to all the former absurdities the statement that the water flows backwards. For the surface of Rakas-tal lies about 40 feet lower than Manasarowar. Such a mistake Kawaguchi ought not to have committed, for when he afterwards crossed the Sutlej, which he calls the Langchen Khanbab, he says: "My companion told me unasked that this river comes from Manasarowar." Poor as the narrative of the Japanese priest is in geographical matters, it is still interesting reading. He recounts the smallest details of his adventures, and all the little dangers to which he was exposed. As

the noble Sakya-muni triumphed over the tempter at Buddh Gaya, so Kawaguchi turned a deaf ear to the fervid declarations of love with which Dava, a child of Manasarowar, nineteen years old, assailed him; a maid of the wilderness who tried to allure him with the hundred yaks and four hundred sheep of her father. "I could not help pitying this innocent little creature," he says chivalrously; "pretty she was not, but not ugly; she was a smart little figure. . . . Dava of course could not compare with the daughters of the archfiend in attractiveness; but she could weep and implore just as well as they." Kawaguchi, however, was adamant, and did not forget the vow which binds the priests of Buddha. So Dava's dream came to nothing; she was never to exchange the snow-clad summit of Siva's mountain for a sight of the peak of Fuji-yama, the sacred mountain of the Japanese.

Kawaguchi performed the circuit of Kailas, prescribed to pilgrims. Among the troop of pilgrims he made the acquaintance of a robber from Kham, who accompanied his steps with the following lamentations:

O holy Kang-rinpoche! O great Sakya-muni! O all Buddhas and Bodhisattvas at the ten corners of the world and in all ages that were and are and are to come! I have been a wicked man. I have murdered several people. I have stolen all sorts of things that did not belong to me. I have carried off wives from their husbands. I have again and again stirred up strife and have beaten people cruelly. All these great sins I now repent of and now do solemn penance for them on this mountain. By this act of confession and repentance I believe that I shall escape the penalty of those sins. I also perform this penance for my future sins, for it may be that I shall again commit sin, and that I shall rob men of their goods, carry off their wives, beat them to death or thrash them.

But we cannot accompany Kawaguchi on his farther wanderings through Tibet. From every page of his book a puff comes to us of the pure, unadulterated Asia, where everything—even the huge mountains and the turquoise-

blue lakes—is involved in a network of religious preconceptions and legends, and where the image of the noble Sakya-muni, serene and dreamy, seems ever to hover before the eyes of the wanderer and conceal from him the world of reality.

What does the lately deceased English missionary, Graham Sandberg, say of the regions which have now so long occupied our thoughts? He was never in Tibet himself, but he made this country the object of a thorough study, and in 1904 published a valuable work upon it. He gives an account of the history of exploration since 1623, and arrives at the conclusion: "The sources of the shortest great river rising in and flowing out of Tibet, the Sutlej, are not to this day absolutely known." He continues: "It is still a subject of mystery and speculation where so familiar a river as the Indus takes actually rise." Three years later these questions were no longer a riddle; but by that time the missionary had gone where we must all go some time.

In his *Handbook of Tibet*, which also appeared in the year 1904, the well-known Asiatic explorer, Sir Thomas Holdich, remarks: "The Indus rises on the slopes of Kailas, the sacred mountain, the Elysium or Siva's paradise of ancient Sanskrit literature." This was also the opinion of Desideri two hundred years earlier. Holdich places the source of the Sutlej on the southern flank of Kailas. Now we know that the Indus starts from the country on the northern side of the Trans-Himalaya, and that the Sutlej springs from the northern flank of the Himalayas.

Major Ryder and Captain Rawling marched along both lakes in the end of November 1904, that is, precisely at the same season as Father Desideri in 1715. The ice-blocks which choked up the channel between the two lakes came, it was discovered, from springs in the bed, and the surface of Manasarowar lay 2 feet below the highest point of the bed. But the monks of the Chiu-gompa declared that some water flowed out of the holy lake every year in late summer.

Such an outflow had not occurred from Rakas-tal for fifty or sixty years.

Rawling is near the true solution when he says that the question is still open, whether one of the brooks entering Manasarowar from the east should not be held to be the source of the Sutlej. But he does not follow up this theory, and, like Ryder, he excludes the lakes entirely from the river system of the Sutlej, leaving the determination of the actual site of the source to future explorers.

The decisive words were spoken in the year 1907, just at the time when I was in southern Tibet, by Colonel Burrard, who proved quite conclusively that both lakes then belonged to the Sutlej system, even if they sent out an insignificant brook to the bed of the river only once in a hundred years (see Vol. II. p. 188).

We have now only to refer to the last visitor to the lakes before my journey, Mr. Charles Sherring, who made the circuit of them in 1905. He makes the Indus rise in the Kailas range, which in itself is an indefinite statement. The Brahmaputra he brings down from the Marium-la, or the country lying in the immediate neighbourhood of this pass, which is not according to the facts. On the source of the Sutlej he can only say that Moorcroft saw it, and that it *now* lies near Dölchu-gompa. He gives an excellent photographic panorama of the channel between the two lakes, and says that from this picture any one can decide whether there is a connection and how it is formed. He is quite right. Even in 1904 and 1905 photographic views were necessary to convince certain doubters of the existence of a channel which the Chinese knew of two hundred years ago.

In 1905 no water passed through the channel, but Sherring heard that there was an outflow after heavy rains.

We are now at the last pulsation in these much-discussed waterways. I have already given an account of my own observations in the second volume of this book. There I

have told that the lakes were in 1907 cut off from each other, and also from a connection with the Sutlej, unless there were a subterranean outlet to this river. This year was unusually dry even in the rainy season—August and September—and only twice did light showers fall on the highlands. The nomads generally complained of the drought; the pastures were yellow, the grass was poor, and it was expected that the famished flocks of sheep, which had suffered from scanty fodder during the warm season, would not have enough stamina to get through the following winter.

Many beds and ditches were quite dried up. The twelve beds carrying water which debouched into Manasarowar, and which I measured, discharged 1010 cubic feet of water per second, or 88 million cubic feet in the day. And yet it was not nearly sufficient to compensate for the loss by evaporation. The surface of Manasarowar stood 7.4 feet below the top of the sill of the bed near Chiugompa. Three years before Ryder had found there a difference of level of only 2 feet. It was plainly evident that only heavy deluges of rain could raise the surface of the lake to such a height that water could pour into the channel past the monastery.

In the summer of 1908, when I visited Manasarowar the second time, no change had occurred. Yet during the rainy season of this year the south-west monsoon did its duty thoroughly. Often the rain poured down in torrents during my march along the Sutlej valley. It may be safely assumed that the twelve larger streams and the innumerable small rivulets, which collect into Manasarowar, then brought to the lake ten times as much water as in 1907. Just as certain is it that the lake level was rising slowly but steadily.

I suspected that the period of drought was over, and that another, characterized by more abundant precipitation, would follow. But how was I to learn whether I was right or not?

Then I remembered my friend Gulam Razul, the rich merchant in Leh, who sends caravans annually from that town to Lhasa. He was a clever, educated man, and had helped me before. I wrote to him asking him to inquire what the rainy seasons had been like in the last years, and whether water had flowed out of the eastern lake into the western, and out of the western into the Sutlej.

In a letter dated Leh, June 12, 1911, he informed me that a very large quantity of rain fell in the autumn of 1909, and that the rainy season of 1910 lasted nearly three months, with far more plentiful precipitation than in the previous year. All the watercourses were filled, and a roaring stream was in the bed near Chiu-gompa. The water poured into Rakas-tal. Thus one link in the broken chain had been inserted. The other link, the outflow from Rakas-tal to the Sutlej, had not, however, been renewed. Thakur Jai Chand, the agent of the Indian Government at Gartok, confirmed, I should like to add, Gulam Razul's statements.

It is clear that only after several successive seasons of heavy rainfall does the lower lake rise high enough to overflow into the river bed.

It would take us too far afield were I to enter here into all the interesting questions connected with this hydrographical problem, such as the advance and retreat of glaciers, the rainfall at the meteorological stations of the western Himalayas, the famine years in India, etc. I only wish to show that the apparently contradictory statements of different travellers may be explained by the periodical variations which cause the lakes to overflow at times, and then again to be cut off from the Sutlej.

All reports from the years before 1904 speak of an outflow from Manasarowar. In 1812 and 1816 the lake was isolated; in 1817 to 1819 it discharged water; in 1843 it appears to have been cut off; from 1865 to 1900 there are only three reports of any value, and these all speak of the isolation of the lake, but notwithstanding it is

quite possible that the lake may have overflowed occasionally, though no one happened to be there to confirm the fact. In the year 1904 the bed may have carried water, but from 1905 to 1908 it lay dry. In the year 1909 began a new period of discharge.

The lower lake had certainly an outflow in the years 1715 and 1762 to the Sutlej. We have no reliable data for later years. It seems probable that the lake has been isolated for nearly a century, and the statements of Tibetans to the contrary are too contradictory. This much is certain, that the periods relating to Rakas-tal are of greater length than those of the oscillations of Manasarowar. The former extend to a century, perhaps two, but the latter last only a few years. Thus we find that in the interval during which Rakas-tal has been cut off from the Sutlej, Manasarowar has had five periods of discharge and as many without.

The two lakes therefore act as the most delicate and sensitive instruments under the influence of wind and weather. No apparatus designed by man could indicate more exactly the sway of the south-west monsoon over the country between the lofty mountains, and no rain-gauges, however closely they might be installed, could give a clearer and more homogeneous notion of its relation to the surface water flowing off through the bed of the Sutlej. It is a pity that it is so seldom that any one has taken the trouble of going up there to read off this excellent record of the rainfall.

As the periodical variations of the discharge of Manasarowar are still in progress, there is nothing to prevent the same phenomenon occurring in the case of Rakas-tal in the future. At present this lake is at a downward section of the curve, or the absolute height of the surface is, perhaps, at a stationary minimum. But this curve may bend up again, and, finally, the surplus water may pour once more into the Sutlej as in the days when Kang Hi's topographers drew up a map of southern Tibet.

The water of Manasarowar is sweet like river water, as is to be expected seeing that the lake has an outlet, though only periodically. The flavour of the water should not be tasted at the shore, for there decayed fucus and algæ are packed together into brown or black clumps. One of the European visitors to the holy lake thought he perceived a disagreeable after-taste in the water, but if he had had an opportunity of rowing out far enough from the shore in a boat, he would readily have admitted that no better drinking-water can be drawn from any glacier lake.

Rakas-tal, which lost its superficial outlet perhaps a hundred years ago, is, nevertheless, as sweet as its neighbour, whence it may be inferred that its water is renewed constantly by a subterranean inflow. Until the water of the lake acquires a decided briny taste, we cannot affirm that it is cut off from the Sutlej system.

The extraordinarily dry summer of the year 1907 was very favourable for river measurements. No local torrents of rain caused particular streams to swell. All were quietly and regularly fed under similar conditions. Of the 1010 cubic feet of water which flowed per second into Manasarowar 397 were discharged by the Tage-tsangpo. The next largest brook, which descends from Gurla Mandatta, carried only 100 feet, or a quarter of the volume of the Tage-tsangpo. It is, therefore, easy to decide which of the two should be called the headwater of the Sutlej. Chinese and Tibetans say that it is the Tage-tsangpo, and they are quite right.

In his delightful article on the far too meagre and superficial notes on religious history contained in the first two volumes of this book, Baron Anton von Ow exclaims on the Manasarowar of the Hindus and the Tso-mavang of the Tibetans:

> Here on the most remarkable heights of the globe we have actually before us the lake which was celebrated thousands of years ago as the mythical lake of Haoma and Siva; here we have the mythical Pushkara, the lotus pool from which Brahma

rose—here the Chin lake of the Chinese myth, in the midst of which the divine Buddha child reposes on a bed of lotus blossoms!

Celebrated in grand hymns by the poets of remote antiquity, a dwelling-place of mighty gods, a mirror beneath the paradise of Brahma and the heaven of Siva, the goal of innumerable yearning pilgrims, a refuge of the royal swans of romance, the wild geese of reality, the most wondrous lake on earth lies dreaming among the snow-clad summits of lofty mountains. Manasarowar is not dead like the thousand salt lakes of Tibet. It sleeps only on calm nights, when the silence of death hovers over its bright mirror and the silvery wake of the moon quivers behind the boat of the stranger. But it lives and breathes when the storm sweeps with raging fury over its liquid expanse and raises emerald-green crystal billows on its bosom, and when the surf beats heavily and monotonously against the shore. It opens wide its arms to receive the foaming brook which dashes down from Gurla, glistening like gold in the sun as soon as its water emerges from the shadow of the mantle of clouds and from the granite ravine. One seems to hear the pulse of the lake-god beat when the water escapes at times through the veins of the Ganga channel. One seems to hear the morning prayer of the lake when the copper trombones sound on the temple roofs, and the pilgrims of Buddha murmur their never-ending "Om mani padme hum."

In lights and shadows, in colour and illumination, in moods that change from hour to hour and season to season, in charming views and fascinating perspectives, Manasarowar is the most beautiful of the lakes of Tibet. Once when I had pitched my camp on the western shore, I perceived the threatening calm after a windy day which is the forerunner of a storm. To the north the sky was dark, heavy bluish-purple clouds passed over the heights. The knobs of the Pundi mountain stood out black against the first bluish-grey fringes, the heralds of the storm-

clouds. The foot of the mountains had a brick-red hue which contrasted strongly with the malachite-green water. Shortly after the hurricane broke, the lake boiled up into white foaming waves. Far away to the east its tumultuous surface was as green as laurel and syringa, but towards the western shore the tones grew lighter, and near this margin the water glittered in the green colour of the birch's spring foliage. The calm lagoons, sheltered by banks of mud from the onset of the waves, were tinted bluish-violet by the reflexion of the storm-clouds in the colourless waves.

Bewitching and romantically beautiful is the scene displayed westwards in the evening hour. The sun has just set, but its streaks of yellow gold still linger, a dazzling sheaf of rays, on the edge of the horizon. The whole sky is vividly yellow and the lake looks like liquid amber. After a time the western sky flares up in ruddy hues, a sharp background to the pitchy black mountains. The steel-grey summit of Kailas rises in its eternal majesty to the north, and soon the new night spreads its shadows over its firn-fields.

But the scene is finest in the morning, when the sun begins his triumphal course over the earth, first clothing the summits in purple flames and then pouring his gold over the eternal lake and its holy mountains.

The sight of the lake makes the stranger involuntarily meditative. His thoughts are not disturbed by the nomads who inhabit the country with their black tents and white flocks, nor by the monks who are for ever turning their prayer-mills. This lake is itself a huge prayer-mill, as it were, a ring of pious pilgrims revolving round its axis. As far back as traditions and legends carry us, Manasarowar has attracted the aspirations of men and their prayers. On its banks we tread on ground which was already classic when Rome was founded. Here legends and fairy tales whisper round the cliffs and precipices, and here Siva swims in the form of a swan by the foot of the mountain of the gods.

"Therefore is the Sutlej also so important among the rivers of the land of lamas. Now and then he reposes in the arms of the holy lake, as though he would there forget the furious combats that await him on his long way to the coast. But when the hours of rest are over, which in their brevity and transitoriness are like geological seconds, then the newborn river gathers up its strength and breaks through the isthmus. If his strength is great enough he also bursts the fetters in which Rakas-tal confines him. Unlike the Indus and Brahmaputra his youth is short, being marked by the parallel ranges of the Himalayas and the æolian basin in Hundes. Already at Shipki begins his ripe age, the time of roaring stormy labour, when the river with irresistible energy cuts his way through the Himalayas. Wearied and silent, majestically calm and dignified, he emerges from the mountains to traverse the Punjab; this is the time of old age. At last he joins his fortunes with the Indus. Turbid and weighted with the soil of India, the dying streams glide gently and quietly into the desolate ocean which encircles the globe with its waters.

CHAPTER XX

A DIZZY PASSAGE OF THE SUTLEJ

THE gates of Indra's heaven stood open and the monsoon rains poured down. How the Sutlej would swell up when the ground was soaked and the rain-water could find a way straight down to the rivers! At Tirtapuri, however, it was still possible to cross the river. A yak caravan from Gyanima had encamped on the left bank. The drivers began to unload the animals; evidently they meant to defy the river, lest they should be compelled by continuous rain to make a long detour past Dölchu-gompa.

Immediately above the monastery the river bed is rather broad. Two drivers mounted their most powerful yaks and plunged into the rushing waves. The baggage yaks were driven in a compact black mass into the river and guided by whistling, shouting drivers. Only the heads of the yaks, the riders and the loads were visible above the water. The animals did their work capitally. They were strong, sure-footed, and never lost their hold, however much the current endeavoured to carry them away. Dripping like sponges the yaks clambered up on to our bank and then stalked on.

I decided to dismiss half my men at Tirtapuri. The men who had been the nucleus of the caravan during the severe winter—Lobsang, Gulam, Kutus, Tubges, Suen, and Kunchuk—should accompany me to Simla; Abdul Kerim and the other five should return to Ladak through Misser and Gartok. As usual they submitted to their fate without a murmur. They received their pay, and I

gave them in addition a liberal gratuity; an extra sum for new clothes, and their travelling expenses were also counted out to them. After this severe bleeding I had only 650 rupees left, and therefore had to be careful afterwards.

Before the sun rose on August 2 I thanked my returning men for the last time for their faithful service and bade them farewell. They had only two hours' journey to Misser, so Kutus and Suen were allowed to accompany them and transport their belongings on our own mules. In Misser the authorities were unfriendly at first, but when they knew for certain that I was not with the men they allowed them to hire the yaks they needed.

In the course of the afternoon our much-diminished caravan was made ready. As though to make up for the loss of our men, a young lama came down from the convent and offered to act as guide on the way to Kyunglung. He was received as a rescuing angel, and our tramp with the wealed back received his dismissal and also ten rupees; he thought himself rich. With bundles on their backs and staves in their hands five poor pilgrims came up and reminded us of our duty to pay toll to all those who are on a pilgrimage.

Curious creatures! They wander about by the year together, living entirely on alms. They pass their nights in monastery courtyards in the company of the half-wild sacred dogs, or in the antechambers of the temples under the protection of the spirit kings. Where there are neither tents nor sanctuaries, they seek a lodging in caves and clefts, and light their evening fires with flint, steel, and tinder. They are a terrible burden to the nomads living on the highroads, for who can have the heart to cruelly turn away a man on his way to or from a holy place?

Below Tirtapuri the valley expands considerably. Our path runs north-west along the foot of the lowest erosion terrace, over fresh juicy meadows here and there interrupted by spots which have been flooded, and where the

clayey mud is still shiny with moisture. The river prefers the left side of the valley; on its slopes are seen four sharply marked terraces like the seats in a circus. Another tributary rushes down from the north-east; its name is Misser-chu, its sources lie among the recesses of the southern flank of the Trans-Himalaya, and its volume is now 565 cubic feet a second. In the rain-mist one can only imagine the lofty regions among the snow-clad crests whence this watercourse descends.

We passed the night on the pasture-land Gerik-yung, where the height was 13,830 feet. The rain pelted drearily on to my tent and all the streams swelled up still more. Next morning a small yak caravan passed by.

"Where are you travelling to?" we asked.

"To Totling-gompa with tea."

"Have you *tsamba* or any other edibles to sell?" we inquired, for we were living from hand to mouth and had no stores left.

"No," the yak men replied, "only tea, and that is not for sale, for it is intended for the use of the monastery."

"Well, be off, then."

A shrill whistle, and the yaks trip down to the gloomy portal of the narrow ravine to which the Sutlej valley now contracts.

Samtang Rangdol, the young lama of Tirtapuri, rides on a yak beside me that he may be always at hand to give me information.

"What is this place called?" I ask at the first promontory round which the path winds.

"Palgye-pugu," he answers; "up above on the top are the remains of old ramparts; once a royal mansion stood there, named Kardong."

"Now tell me the name of this side valley."

"We call it Chornak; it comes down from the Jarko-la pass over which the *tasam* runs."

The Jarko-la is an important pass, for it is on the watershed between the Indus and the Sutlej. Ryder and

Rawling crossed it in December 1904. Now the brook in the valley carried 388 cubic feet of water as black as if it had flowed through vegetable soil or coal. Exactly opposite, on the left side, the Sutlej receives a large affluent, the Haltshor-chu, which descends from the hills round the high plateau of Gyanima. Samtang Rangdol affirmed that this river had as large a volume of water as the Sutlej itself, and therefore was held by some to be the present headwater of the Sutlej. But in a previous chapter I have shown that the Haltshor must be relegated to the position of a tributary. The volume of the Sutlej below its confluence with the Haltshor may be estimated at 6350 cubic feet per second, or twice that of the Brahmaputra at Tuksum at the beginning of July the year before. But in the year 1907 there was hardly any rain, and hence the great difference.

We waded through the broad but shallow Chornak-chu, and saw at the foot of the next projection ten ruined *chhortens* which had been erected, Samtang Rangdol told me, by Pembos, the schismatics who used to come hither in former times to worship an image somewhere in the surrounding mountains, but as their rites caused annoyance at the orthodox Tirtapuri, this pilgrimage was forbidden.

Here, too, the Sutlej rushes furiously along the left side of the valley. But the expansions have now come to an end and the river cuts its bed with irresistible force through a narrow winding chasm where only the rock pigeons can follow its course. Therefore the road deserts the river and runs up the mountain on the right side of the valley in innumerable zigzags. We first cross the mouth of a small transverse valley, called Tsaldöt, which comes not from the Trans-Himalaya, like the former, but from the Ladak range, the mighty partition between the Indus and Sutlej. And then we work our way up to the small saddle Tsaldöt-la, where the height is 14,748 feet.

The mist hides the distant view, but as far as we can

see the landscape is uncommon and grand. Deep down below us yawns the gigantic abyss which the grinding waters have carved out through countless ages. The sides fall down sheer and the river cannot be seen, but its heavy hollow roar resounds among the mountains like growling thunder. Soon the heights of the Ladak range will screen the Trans-Himalaya, but we should still see some of its ridges did not the opaque rain-clouds envelop them. Behind us gleam the green meadows of Tirtapuri, but all on our way in front is of the greyest grey.

From the ridge of the pass the wildly fissured mountain looks fairly uniform, but much foreshortened. We are astonished at the view of the Sutlej valley and its great tributaries which are all very steeply or even vertically cut down into the earth's crust, forming a maze of ditches and corridors, which are nearly allied to the cañons of the Colorado. We seem to be on the limit of two different forms of landscape. We have left the horizontal lines, the gentle undulations of the earth's surface. Now vertical lines begin to come into prominence, the grand rugged sculpture that is eaten down with unsparing energy. The mountain ranges stand like weathered ruins on the pedestal of the plateau country, and the disintegrated material contributes to fill up the hollows in the ground, and smooth down the surface. But here in the wonderful land we are now entering the products of weathering are washed away by the ever-flowing rivers.

Slowly and cautiously the caravan advances along the steep precipices. Sometimes we are three hundred feet above the level of the river, sometimes nearly six hundred; we ascend, descend, turn to the left, then to the right, and struggle painfully and slowly over small ditches among pebbles and small boulders. Often we ride along the edge of a precipice, where a single false step would hurl us into the depths.

Before me rides the lama, Samtang Rangdol, on his black yak, wrapped in his red monk's toga and with a cloth

wound round his head. My curiosity amuses him, and he gives me scraps of information even when I do not question him. Now he leads us up to another saddle and again we stop dumb with admiration and astonishment at the bold peculiar sculpture of the Himalayas. The cloud masses of the south-west monsoon hang like a gloomy canopy over the brow of the Himalayas, and send down lighter rain fringes over the valley, at the bottom of which the Sutlej plays its funeral march in ever rumbling organ tones.

A green spot glimmers among the grey indistinct rain-washed mountains—the meadows near the Kyung-lung monastery. We are a day's journey from that place which yet looks so near. The time of straight lines and long days' marches is over; here the path winds along as often precipitous as horizontal. A point may seem quite near, while the distance to it is hopelessly long by the path which twists in all directions.

At length the path runs down over a chaos of ridges and rocky spurs of micaceous quartzite, separated by deeply excavated valleys and troughs. Now we ride on the left side and then on the right side of a ridge, and in either case have a deep ravine on our other side. Over the last declivity we come down to an expansion of the valley and pitch camp 462 a yard from the bank of the Sutlej and a yard above the water. We are 14,003 feet above the sea, and have descended only 253 feet from Tirtapuri and 1053 from the Langak-tso.

Immediately above this fine camping-ground the narrow corridor which forced us to climb the heights comes to an end. Proud and mighty, like a king among rivers, the Sutlej comes forth from its rocky portal and spreads out in an expansion of its valley. Its thick turbid and brownish-grey water rushes in a compact mass of foaming and heavily thundering billows out of the chasm. The depth might then be 6½ feet, perhaps 10 or even 13 in the deepest channel of the bed. Our lama told us that there is a ford here which may be used in the dry season. It is

then better to pass over to the left bank instead of climbing up again over the mountains on the right.

The way we take over the Himalayas may certainly be called a *high* road, an imperial route if one likes to call it so, but it is not a grand trunk road, a main artery where Indian and Tibetan traders meet to barter the coral and pearls of the warm seas for the sheep's wool and yak hides of the land of snow. All day we meet not a single soul, no travellers, no animals, wild or tame. Seldom do we see a smoked slab of stone, the ashes of a dung fire, or the stones of a fireplace where a black tent has stood over the flames.

Here peace rules. The mighty river reigns in majestic solitude. I could not take my eyes away from its brown bubbles as they hurried on their headlong descent to India. We should soon follow it. I loved this stream, for no white man had ever seen its source before me. I was to follow its course to the sea with increasing interest and ever greater eagerness. It was grand to fall asleep by its dull roar and hear it again when I awoke.

During the night the river rose 1½ inches. The temperature did not fall below 43.5°; it must gradually rise as we come down to lower levels. But at present the land of warm nights is far away.

From the camp the path runs uphill over the terraces and hills of the right bank, and after a short time we find ourselves at an unpleasant place which Samtang Rangdol had prepared us for beforehand. Here I preferred my own feet to those of the horse.

The path clings like a cornice to the precipitous flank. We creep into every gully and cleft of the precipice, wind round every outstanding rock, mount and descend and avail ourselves of every capricious curve of the solid rock. Irregular staircases run up and down in the bare calcareous sandstone and quartzite, where man's hand has never been raised to remove an obstacle from the path or level an inequality. It takes us quite two hours to get over a length of little more than a hundred yards. The loads are un-

strapped and carried by the men. Only two energetic mules contrive to get over the ground safely with the sacks and tents with which they are laden. The worst spot is a steeply sloping flat, the surface of a stratum without fissures or inequalities to give a sure foothold. The animals have to slide down this toboggan with stiffened legs, while one man leads each by the halter and two others hold it by the tail to put the brake on.

Then the animals were loaded again and we crossed two deep troughs down to the river. The path ran between the bank and the foot of the lowest erosion terrace. Old terrace shelves skirt the steep walls of the left bank, often projecting in cornices and overhanging slabs, and rising 230 to 260 feet above the valley floor. Various bands of gravel, sand, and clay crop out in its exposures. Not much room is left for the path during the rainy season, and there is seldom space enough for a strip of fair grass. At the entrance of a large side valley on the left there is an open flat where a vividly green field of barley is ripening for harvest. But there is not a man to be seen. Perhaps the owner of the field lives in Kyung-lung, whither a road runs along the left bank, passing two large *mani* walls.

Among light-coloured rocky slabs, knobs, and ridges of very fantastic forms, the valley again contracts to a wild narrow chasm. We were just at its commencement, when a man came running after us shouting loudly. At last a human being in this lifeless country! Or perhaps it was the outrider of a troop which would force us to return to the path of duty. No, not at all! When the man came nearer we recognized our striped friend, the tramp of Chiu-gompa, who trotted up breathlessly swinging his cudgel to keep off the dogs, which had always held him in suspicion.

"What do you want, 'Beggar'? Did you not receive your pay, and were you not dismissed for good?"

"Yes, sir; but just as you rode away a Gova and his men came to Tirtapuri, and the monks complained to him

that I had shown you the way to the monastery. Then the Gova threatened to take me bound to Gartok, there to be brought before the Garpun and be beaten."

"How did you contrive to escape?"

"I managed to steal away from Tirtapuri in the dark, and now I have almost run myself to death in trying to overtake you."

"And now you wish to travel with us again?"

"Yes, sir, let me go with you to India. If I return to Tibet I shall be beaten to death without ceremony."

"Well, come along in the meantime."

But now we have something else to think of. Before us yawns the chasm which the river in its fury has cut through the living rock, which, as expert evidence informs us, consists of micaceous quartzite and concretions of carbonate of lime. What a difference between this river and those we have known up in Tibet! They glided smoothly and noiselessly along their beds. Here, on the contrary, we see a river which collects all its energy to eat down like a saw blade into the rocks and free itself from its gaol of solid stone. It no longer babbles clearly with a rippling lapping murmur, but roars with a dull heavy din which fills the narrow valley, that valley where all loose products of weathering are swept away from the sides, and where we feel as if the rocky foundation trembled beneath the weight of the 6350 cubic feet of water per second.

But what is become of the majestic river that we have just seen? The Sutlej has shrivelled up to nothing; it is smaller than the Tokbo-shar. Ah, it is only an illusion; the velocity is tremendous, the depth must be enormous. Look at this wild tumultuous sheet of water which is thrown up into permanent waves, their form and position prescribed by the inequalities, windings, and coves of the river-bed. See these rounded domes which resemble in form a propeller blade and are always boiling at the same spot. And there a comb foams with hissing flakes which remind us of the clods torn up by the ploughshare. And

here is a row of undulations which curve their backs gracefully and like dolphins and porpoises shoot along in merry, careless play.

All this water is thick as pea-soup owing to the solid matter washed down by rain and torn up by erosive action, which enables the river to deepen its bed more effectually. Here, at Kyung-lung, the river has to contend with the first formidable obstacle, a bar across its course. We shall find many such obstacles on the march before us. They increase in size on the way down, as the river does in breadth. One of the finest, most imposing breached valleys in the world is that which the Sutlej has cut through the Himalayas. Our suspense increases day by day. We look on the map and wonder if the river will carry out its intention successfully.

We are down at the bridge of Kyung-lung, where for the first time we pass, not through the Sutlej, but over it. Here beside the bridge-head on the right bank is a red and white *chhorten*. It has no more to do with the structure of the bridge than the small kiosk-like chapels which stand at the right bridge-head of the Nicolas bridge at St. Petersburg, and in which peasants and citizens kneel and cross themselves before the pictures of saints. The difference is only that the *chhorten* of Kyung-lung, perhaps from time to time restored and improved, stood as a protecting bastion of the bridge many centuries before St. Petersburg was founded.

What does this *chhorten* mean? Just what the decorated cairn does on a pass or a *mani* wall on a road: an offering, a homage, an appeal to the powerful spirits of the river not to make use of their physical superiority against helpless man. It stands there as an eloquent witness that the bridge is under the protection of the gods, and that the traveller may confidently entrust his life to its bending planks. Were the *chhorten* removed from Kyung-lung the spirits of the Langchen-kamba would be angry and demand a human sacrifice; the bridge would give way under the

weight of the traveller, and the victim would perish in the seething whirlpool.

Not far from the bank stands a row of red-painted *mani* walls and pyramidal *chhorten*. About three hundred feet above the river the monastery of Kyung-lung is poised like a swallow's nest on the top of a singularly modelled pebble terrace. The rain-water has washed out cones and shafts, walls and towers in its steep front. Quite at the top of this apparently frail substructure is throned Kyung-lung, turning a brick-red façade towards the river, and it reminds us of Lamayuru in Ladak, though it is much smaller. A building on a lower shelf is said to contain monks' cells and storerooms. Dark holes and embrasures in the vertical wall of the terrace indicate cave-dwellings. A splendid position, a wonderfully beautiful prospect! The Tibetan lamas have a sharp eye for architectural beauty, lines of solid simplicity, and show a highly educated taste. The brotherhood of Kyung-lung consists of eight persons, and, like most others in the neighbourhood, they belong to the Gelugpa or orthodox sect.

Lama Samtang Rangdol has taken leave of me and is gone up to the monastery. While my Ladakis unload the animals, I examine the bridge, which is in the usual Asiatic style.

The bridge spans the Sutlej where the river is narrowest, two projecting rocks approaching each other with an interval of 43 feet. Four layers of short beams are walled into the precipitous faces opposite each other, the uppermost, which rests on and receives support from the three others, being longer and slanting outwards. On their extremities rest the two round and swinging tree trunks of the suspended bridge, which in their turn bear the planks. The unevenness in the footway left by the axe has been removed by wear, rain, and sunshine. The woodwork is greyish-white, peeled and fragile, and the whole structure shakes under the feet. It is putting one's life in peril to cross, not knowing when the limit of elasticity will be reached.

The bridge is only 45 inches broad, and there is no hand-rail to give protection. The depth of the river here must be considerable; the breadth was not more than 45 feet, but the velocity of the current was tremendous. Even if we had possessed poles long enough to measure the depth, we could not have used them, for the pressure of the compressed volume of water would have broken them like reeds. Immediately above the bridge some bosses of solid rock and white pinnacles of stone rise above the surface, while between them the raging stream boils and whirls before forcing its way into the narrow trough below the bridge with deafening roar, hissing crests of foam and showers of spray.

A Tibetan came running up on the farther bank. He made gestures with his arms as though to keep us back, and we could see that he was shouting something, but it was impossible to hear anything but the roar of the river. We made signs to him to come over to us, and he came.

"What is the matter?" we asked him.

"The bridge will not bear the weight of a horse, but the mules may perhaps cross without the beams breaking."

"Do you suppose that we are going to leave our horses here?"

"They can swim across the river farther down. You see that the Langchen-kamba widens out there and is quiet."

"If the bridge will bear the mules it will the horses also. We shall see. I only hope that it will not collapse when half the caravan is over and split it in two."

"I advise you to be careful. The bridge is rotten and bad."

"How old is it then?"

"It is ten years since it was last renewed. The bridge-heads were built thirty years ago."

The Ladakis are accustomed to dangerous bridges at home. They walked over carrying the loads on their backs with firm straddling steps. Only one man on the

bridge at a time! I saw the last load laid down on the farther bank with a feeling of relief, then crossed and stationed myself beside the left bridge-head.

Now come the animals. We had bought ten goats which supplied me with milk. Let them try the bridge first. Goats are not endowed with much sense. The whole pack remains standing, as though rooted to the ground, where the planks join the firm bridge-head. They want to turn back, scenting something disagreeable. The river seethes below them. Here there must be some pit-fall which some villains have placed in the way to destroy them.

"On with you, you beasts!" shouts Tubges, the herdsman.

If only they had sense enough to cross over singly! But no, they must, of course, crowd up together, with the danger of pushing one another off the bridge. They do all get over, but with a close shave.

"One of the mules to the front!"

A little animal from Lhasa is driven up. He has surely seen a bridge before, for he is quite calm, and manages the feat very cleverly. He steps on to the planks without hesitation, and counteracts the swing of the bridge by loose elastic movements of the knee. He bends his head down and smells the bridge as he goes, keeping exactly in the middle. His comrades cross with the same composure.

Horses are more stupid than mules, at least in crossing bridges. Ours were from Chang-tang, and had never seen a bridge in their lives. The first that was driven up shied, turned round and ran away. Number two followed his example. So they had to be led across. But, in order not to load the beams with too heavy a weight, the rope was made as long as the bridge, and two men laid hold of it and pulled with all their might, while two others lashed the horse from behind until the refractory animal ventured out on to the planks, and, trembling as much as they, tramped across heavily and stupidly.

Now remained the two white horses I had bought of the robber chief Kamba Tsenam. The one, a large powerful animal, reared and preferred blows and stripes to the awful bridge. Perhaps the goats would encourage him. So they had to take the walk again. Then the horse plucked up courage and galloped across so fast to reach firm ground again that he was within a hair's-breadth of trampling a goat to death. At last came the turn of my riding horse, which had carried me 500 miles from Kamba Tsenam's tent, and had twice crossed the Trans-Himalaya through the labyrinth of the Bongba mountains, passing lakes and fording rivers. I looked upon him as a friend and helper who had shared in my discoveries. He was snow-white and in capital condition, much too good to be drowned in the Sutlej.

Now the horse must submit to his fate. What could he do when the men with united strength tugged at the rope and two others drove him on from behind? He looked very unhappy and anxious, and trembled in all his limbs as he ventured on to the treacherous planks. All would have passed off well if he had only gone straight on. He had seen that the bridge had borne all the other animals, and he must, as usual, have wished for their company. But when he was in the middle of the bridge he was overcome by fear. Regardless of the rope attached to his halter he stopped and turned to the left, so that he stood across the bridge and looked upstream. He gazed into the rushing whirling torrent below. His eyes glared, his nostrils expanded, he snorted loudly, and then he leapt to meet his death in the raging boiling flood below.

His hind hoofs struck against the edge of the bridge, so that the horse made a somersault and struck the water with his back. Of course he is dashed to pieces, I thought. It was fortunate that I had not ridden over this superb bridge. We rescued the saddle, and the only thing lost was the rope, which the men let go when they saw what the end would be.

At the moment when the horse struck the surface of the water he was seized by the furious current, and disappeared at once. We rushed down from the bridge-head to see if the mangled carcase would be brought up again to the top of the rolling swirling waters.

"There he is!" cried Lobsang.

"Impossible! Yes, by Jove!"

Yonder some seventy yards down his white head rose out of the waves. The Sutlej was much broader at that place, as though it would rest after its exertions.

"He is alive, he is swimming!" cries Kutus. No one troubles himself about the other animals.

"Bravo, he is swimming towards the left bank!"

"Yes, or he would have to make another jump."

"Fancy his taking such a roundabout way when he had only half the bridge to cross, hardly ten paces!

"He must have lost his senses."

However, the white horse had by no means lost his energy. A few powerful strokes brought him to the bank, and with two lively jumps he was on dry ground, where he began to graze at once as if nothing had happened. He snorted once or twice, and shook the water off, but all his limbs were sound, and he had not broken any of his legs. The bath seemed, indeed, to have refreshed him.

I hastened to my four-footed friend, wiped the water out of his eyes, and patted him. He was now doubly dear to me. The Sutlej had been unable to separate us, and now we should enjoy each other's society on the road to India. I admired his reckless courage, but had no mind to rival him in boldness. No doubt the horse had been caught up in the volume of water, had become part of it, and had been carried down without striking against a projecting rock. The spirits of the Langchen-kamba had favoured him. That is the advantage of having a *chhorten* erected at a bridge-head!

From the ravine it was not many hundred yards to the next meadowland. The animals were laden again and we

set out. Then we missed the dogs. They were on the right bank, and we could see that they were barking. They sniffed at the river, but it was too furious, and neither of them would cross the bridge to save his life. Then Kunchuk went over with Little Puppy on his arm. When he was in the middle he set the dog down, thinking that he would run over the other half by himself. Not if he knew it! He did not, indeed, act like the white horse, but laid himself down on his belly, crouched down close to the planks, and howled piteously, not daring to move a paw, and quite paralysed by terror. There he waited until he was carried over the other half. But he was so frightened that he sobbed badly all the rest of the day. Takkar was dragged unmercifully over the bridge by strong hands.

CHAPTER XXI

THE RAVINES OF THE SUTLEJ

A CLEAR spring gushed up on the meadow of Kyung-lung. We bought provisions, butter and *tsamba* from our neighbours inhabiting five black tents. Two elderly genial monks visited us and presented me with a *kadakh*.

"Can we do anything for you, sir?" one of them asked.

"Why, yes; I want a guide to Daba."

"All right; I will guide you thither if you will give me the same pay as Samtang Rangdol."

"Agreed; and if you serve me well you shall get something over."

But when it grew dusk the lama sent an excuse. An important monk from Totling-gompa was expected every moment, and he would be very angry if one of the brothers of Kyung-lung were absent. Samtang Rangdol, too, could not be persuaded to accompany us farther, but he begged me to keep the beggar from Chiu in my service, or he would murder him to get possession of his money. The beggar was allowed to remain with us; we should be able to make use of him: there is always plenty to do in a caravan.

However, as we started on August 5, we obtained a guide quite unexpectedly. A tea caravan of five men and fifteen yaks which had rested at Kyung-lung, and was travelling to Totling, set off at the same time. The leader was named Samye Karmo, and he was promised a recompense if he answered honestly all the questions put to him. In the end he went off without his gratuity, so his answers were not much to be relied on.

" The yaks, laden with large bales of tea sewed up in hides, and escorted by their drivers, two of whom carried guns, tramped over rubbish and grass, over rivulets and slopes. They had come into the world as tiny calves in Chang-tang, and found the climate of the confined valley much too hot for their thick coats. So they seized every opportunity of taking a footbath in the margin of the river. One of them went out too far into the water, sinking deeper and deeper. Samye Karmo and his party shouted and threw stones over the yak into the water. But the animal liked the cool water which soaked through his hair up to his back, he snorted and shook his head at the stone-throwing, and went on until he began to swim, the bales of tea acting like a cork jacket. He did not suspect that with his shagginess his life hung by a hair. If the sucking stream had caught him, then—— ! But he escaped it, and dripping like a sponge he climbed up to the bank again. Both concerned in this freak, Samye and the yak, suffered from the consequences, the tea being no better for the wetting and the load twice as heavy.

We had a long distance to the next place where we could ride a whole hour by the Sutlej bank. Meanwhile we said good-bye to the stream. It rushes into another chasm where the volumes of water splash up along the foot of the mountains on the left. Here the precipice is not vertical but hangs over, being undermined by the eroding force of the river. There is, then, no other choice but to climb the limestone cliffs in short steep zigzags and get up to the top. The river disappears below ; its roar becomes fainter and at last is heard no more.

Our road mounts higher and higher. The eyes can roam over greater distances and the horizon retires backwards. The gradient becomes less steep and at last we are on a dome-shaped summit named Munto-mangbo—if Samye Karmo told us the truth. A row of cairns stands at the edge of a vertical wall. The sides of the trench which the river has here cut into the earth's crust are precipitous

cliffs. The Sutlej works incessantly down below. Blocks loosened by the winter frosts are always falling, and are used by the river as tools to chisel out and deepen its bed.

We follow the Chinese tea slowly and gently over the hills and down the steep cliffs, and cross two deeply excavated side valleys without water. We have to cross all those troublesome side valleys which make the journey to India so terribly long. And then we pass over gently undulating heights. The eyes roam over immense distances. One forgets the vertically sunk cañons, and one might suppose that between the low crests and peaks to the north the country is quite level.

Place two rectangular plates slightly inclined to one another and leave a small interval at the bottom; that is the Sutlej valley. But imagine further that the plates are indented with innumerable grooves all running down to the trench in the middle. Such is the country traversed by the road to India, a road which has a superb contempt for the horizontal curves of the map. For half an hour it may run on an even dome between two side valleys and then plunge headlong into an abyss which takes a whole hour to cross. We stand at the edge and see that the opposite edge is only a gunshot off. We should like to jump or fly over, and we see in imagination the viaduct which will never span the valley with its spidery web. But it is no use. We must clamber down the hundred steep zigzags and then climb up again on the other side to reach at last the opposite edge.

Now we remain for a good while up above, for the road runs south-westwards nearly parallel to two cañons. The path is well trodden down, for numbers of men and animals have tramped along it in the course of time. Now it is empty and desolate. If there are tents and huts here, they are hidden down below where brooks irrigate the meadows and barley thrives. Up here the ground is covered with fine gravel, hard and dry. Only tufts of hardy grass are kept alive by occasional showers. A flock of twelve

Ammon sheep flies before us with graceful leaps. Now and then we come across the skull of a wild sheep bleached and worn by sunshine and rain.

Ah! now the level road ends. The bottomless abyss of the cañon Shib or Shibe-chu, mightier than its predecessors, yawns at our feet. As we stand at the extreme edge and look down, we can see the grand river winding along the bottom. At this height the water below seems motionless, but the river twists like a riband from S. 12° W.

Traveller, dismount here, I advise you, or you will be shot over the head of your horse. There are other ways of reaching the valley bottom quicker than you would like, for the ground is often hard and covered with detritus, in which both men and horses slide down if they cannot put on the brake in time. I had put on excellent foot-gear, a cross between a boot and a stocking, made of white felt and ending in a sock of wild ass's hide, but without solid soles. A practical but not an elegant foot-covering. It was warm and soft for riding, but was awkward to walk in over pebbles. But one can endure much without dying, and when the socks are worn through they can be replaced by new ones in a moment.

At any rate we get down, and camp 464 is pitched on the meadows of the Shibe-chu. Next morning the river carried 406 cubic feet of water, and its tributary, the Lunak, which comes from the south-west, 81 feet. The united stream flows through a wild narrow chasm to the Sutlej.

A perplexing country! If I did not draw on my map every bend of the road, every rise and every dip in the ground, I should never be able to disentangle this complicated labyrinth. Where we ride on terrace platforms of earlier or later origin and up hill and down dale in trenches and side valleys, no guide is necessary. But frequently the road runs for a time in a valley bottom and is lost to sight, being swept away by the swollen water. There we should be lost if we had not Samye Karmo. He is

really pleasant company. So the little pug-nosed Chinese lap-dog with the collar of bells seemed to think, which Samye had carried day after day in his arms all the way from Lhasa. The caravan had been four months on the journey, but it had made long halts wherever the pasturage was good. Samye Karmo entertained us with the gossip of the capital. The Dalai Lama was on his way to Pekin, he declared.

"How do you know that?"

"It was the common talk in the streets of Lhasa four months ago."

"When is he coming back to the Potala?"

"I do not know."

"Do they miss him?"

"Not exactly! As for myself, I do not care a rap about him."

No doubt the good Samye was more civil-tongued when the Pope of Lamaism again entered his capital at the beginning of the year 1910. Perhaps also he prayed "Om mani padme hum" with greater fervency than on the road to Daba when the Dalai Lama prepared to make his entry into the Potala, this time from India. At any rate, that pontiff is an important historical personage. He has fought with India and China, and never has Chenrezi been incarnated in an earthly shell which has travelled so far.

So we march on, Samye Karmo beguiling the length of the way with his conversation. He leads us up barren heights and down a steep path into the narrow valley Sang-serpo, where a spring feeds a clear rivulet rippling brightly through luxuriant grass.

"Here we stop," says Samye.

"Why not go on to Dongbo-gompa—it cannot be much farther?"

"No, it is not far; but there is no good grazing there. And, besides, it is dangerous to turn the animals loose at Dongbo-gompa, for there are barley-fields there and the damage the animals do has to be paid for."

"How much is exacted for trampling down the corn in the fields of the Dongbo monastery?"

"As a rule, one has to pay a rupee for every hoof-mark on the field."

"That may be an expensive business if there are many horses."

"Of course; and I advise you to remain here to-day and pass by Dongbo-gompa to-morrow."

We therefore set up our tents, lighted our dung fires, and were glad to be under cover when the rain began. But it was a ruse of the rogue Samye Karmo. He wanted to shake us off, because it might be dangerous to march up to a monastery in the company of a European. After the yaks had grazed awhile on the grassy margin of the brook, they were assembled in marching order by their drivers, and the men from Lhasa went down the valley with their far-travelled tea, singing and whistling. We might have followed their example, but we had already made ourselves comfortable for the night, and did not care to move in the rain.

Good heavens, how it rained that night! The pattering and trickling made it almost impossible to sleep. But though it still rained, we followed next morning the trail of the yaks from Lhasa down the narrow valley and up over hills where the mist shut out the view. Then we lost the track, and the beggar from Chiu who led the van had certainly no notion where the monastery lay. It was by pure good luck that we found it.

A curious scene presents itself in the mist when we come suddenly to the edge of another side valley. The edge seems to end in space, and below us yawns bottomless emptiness. We let ourselves slide down the steep soaked slopes, and thus reach the valley floor, where a flock of sheep tells us that men are near. A tethered horse is grazing on the meadow. A streamered cairn and a pyramidal waymark show us that we have struck the right road. It runs over a confusion of hillocks and trenches

to the north. On the left is another abyss, a side valley of the first rank. Its lower slopes are vividly green with fields of barley which promise a good harvest.

This valley is called Dongbo, and soon we see Dongbo-gompa peep out through the mist from the commanding hill on which it is proudly enthroned. The road ascends steeply, sometimes winding among humps of living stone, sometimes running like a cornice along the foot of vertical pebble terraces, into which caves open, blackened by the smoke of camp-fires.

Like so many other monasteries in Tibet, Dongbo-gompa seems to have seen better days. The first impression is one of neglect and decay—ruins of houses and walls, heaps of sweepings and offal, offensive to the nose, savage measly dogs which rush at us and get a warm reception from Takkar, dirty ragged villagers and monks. If the people had only been civil! But Samye Karmo had warned us against them. They had nothing to sell and would have nothing to do with us. What they had they wanted themselves, and it was no use to chink our rupees in their ears.

While the caravan marched down the bottom of the valley, I stayed awhile above with Kutus and Lobsang to inspect at any rate the outside of the monastery. A dark covered cloister where pilgrims made the *kore* or beatifying circuit of the sanctuary was the only thing out of the common. The gate of the *lhakang* was locked.

I draw a hasty sketch of the monastery and the Dongbo valley which winds down to the Sutlej. But the rain begins again and I cannot draw on wet paper. The weather is too wet both for monks and laymen, and they vanish one after another into their musty holes. The water trickles and drops from the roofs and from our caps, little muddy rivulets ripple down the slopes, for to-day the south-west monsoon gives the Himalayas a thorough drenching, and it would be no harm if Dongbo-gompa and its refuse-heaps were one day washed away. The monastery, dismal,

lonely, and desolate on such a day, must be a charming and romantic object when bathed in sunlight or lighted up by the full moon on clear nights. But in this weather it hangs like a ghostly castle above the abyss.

As the rain did not abate we made up our minds to hurry down the steep declivity. We were wet through when we reached the camp, which stood at a height of 13,390 feet. We had never been so low since we left the Langak-tso. The barley-fields were better than any we had seen before, and our animals had to be closely watched lest they should be tempted to run into the fields. They had to be content with a small meadow by the Dongbo-chu, which carries down to the Sutlej 140 cubic feet of water per second. The tents were pitched close to the stream, which filled the valley with a roar magnified a thousand times by the echo. Again I listened to the monotonous rattle on my tent and the drippings which formed little puddles inside.

We were badly off for provisions. The men had only half a brick of tea left, and there was nothing more for me but a small bag of wheaten flour, tea, and sugar. Not to go to bed hungry, we resolved with bleeding hearts to sacrifice one of the goats. It was cruel, but it had to be. The goat was thin and miserable, but it performed its last act of friendship as well as it could. In the evening my men sang the old songs, but they sounded more subdued than usual, for both the river and the clouds chimed in with powerful lungs.

The temperature at night falls to 40.3° and we have not yet received a greeting from the summer of India. But we are travelling, as on the upper Indus, parallel to the Himalayas, for the actual breach does not begin before Shipki.

Close to the camp begins the steep ascent that leads up to the open heights and distant views. Again we see the general dip of the surface towards the Sutlej valley and the dark straight lines which mark the cañons. And

we have to cross them all. The first two are not so bad, but the third is a valley of the first rank. At its margin I turn my eyes in all directions. N. 25° E. is seen a flat summit covered with snow; it rises up from the Ladak range, which we remember as the watershed between the Sutlej and Indus. The range we have seen for several days to the south is named Zaskar, and on its mighty crest lies the Shipki-la, at the foot of which the Sutlej breaks through the main wall of its prison.

We slip and slide down the sloping flanks and platforms to the bottom of the large valley which the Yungutsangpo has carved out. We see this tributary emerge from a rocky ravine a little above the road and then spread itself out on the expanded valley floor which crosses our route. The river carries 350 cubic feet now, but we perceive by the empty beds, some still damp and others containing longish pools, that it has lately been much more swollen. We have now waded through 7400 cubic feet of water, but as we have not seen the tributaries on the other side of the valley we must estimate the volume of the Sutlej as at least 10,600 cubic feet.

A young Tibetan on horseback overtook us at the river. Was he a traitor or the outrider of a party which would force us to turn back? No; he was only taking a message to Daba, and as he warned us that we should not find water again until we were there, we set up our camp here.

The barley-fields on the lowest terraces of the western side of the valley promised an abundant harvest. Only two poor families lived in ruined huts; the men were not at home, but the women showed that they could very well take care of themselves. They appeared at sunset before my tent where they behaved like suffragists.

"Your cursed goats have trampled down a field of crops. Will you pay for the damage, you villains, or must we complain of you to the monastery?"

"What is the value of the corn destroyed?"

"At least ten rupees."

"Then they must have eaten up all there was."

"No haggling, but down with the cash."

Two of my men looked at the place and found that the goats had indeed been feasting there—and very welcome they were—but that they could not have destroyed barley of more than the value of a rupee. The women received three rupees and went back smiling and satisfied. They had themselves driven the goats into the corn and thus made a little profit even before the grain was ripe. But as I could not afford at the time to pay extra corn duties, I gave my men notice that in future they would be responsible for all forbidden grazing on our neighbours' fields.

On August 9 we ride up out of the valley of the Yungutsangpo; up on the *tanga*, the tableland, we find ourselves 1150 feet higher than in our camp down on the valley bottom. How long will this amusement continue? Eight small side valleys are crossed, a perpetual up and down. The air line may be short, but our road is long and tiring.

After a time the direction is north-westerly, and a new ravine of the first rank gradually opens on the left. To the right begins a small side valley which gradually deepens as it runs down to join the larger. The even elevation on which we ride gradually narrows into a wedge with a point projecting like a springboard into space between the two valleys. It is as though the earth ended at this point and space began. It is too magnificent. I must remain here a long time until I have looked enough.

The caravan may continue its march to the camping-ground of the day. I take my seat at the end of the point, and there I am surrounded by dizzy abysses on all sides except the one from which I came. The view commands all the region between the ranges on the north and south. To the north-west it is unlimited, the yellowish-brown land vanishing into the horizon. I can perceive the position of the Sutlej valley to which the innumerable profound valleys make their way.

The air is clear and not a cloud is in the sky. North and south the view is limited, in the former direction by the Ladak range, in the other by the Zaskar range, both looking rather unimportant and showing small patches of firn on their flat summits. The interval between them may amount to 40 or 45 miles. The cross sectional profile is the curve of a tightly stretched rope, the fall therefore decreasing towards the middle where the Sutlej flows. This, however, applies only to the original valley with its loose deposits and its filled-up basins as seen from any point up on the *tanga*. Seen from a point, such I was on now, vertical and steeply inclined lines predominate. Cut up and hollowed out by rain-water and by rivers which during a damper climatic period were more voluminous than at present, the country with the wonderfully carved ravines at my feet is like a gigantic cathedral turned upside down. The point on which I sit surrounded by ravines has perpendicular sides. Below follows a steep declivity, and then again the fall is very sudden if not vertical. The lowest descent to the valley bottom is less steep, owing to fallen débris which has here accumulated into a fan. Exactly opposite, on the farther side of the main valley, is seen much better and more distinctly a similar formation, a succession of perpendicular and steep declivities from the top down to the valley bottom. In all the corners between the valleys accumulations are collected of closely packed loose material consisting of the finest dust, sand, and gravel. Fractures and landslides frequently occur, but on the whole the formation is characterized by a regularity which extends over the whole country and lends it a striped, checked appearance. The vertical lines are fissures and drainage channels into which the rain-water penetrates, causing landslips. As far as the eye can reach, the same regular design prevails. Over the flat surface of the opposite side of the valley still more valleys can be descried in tones growing fainter and in ever greater foreshortening. Only the uppermost slope is seen in all cases. After the

masterly delineations of American geologists I can recognize with the greatest ease the same eroded sculpture, the same picturesque formation, which have made the cañons of the Colorado river so famous.

On one of the lowest shelves on the western side of the great valley below us the Daba-gompa stands perhaps somewhat more than 300 feet above the valley floor. Below the monastery stands the village of Daba enclosed as in a niche by pyramids, cones, and shafts of detritus. This village is the most important trade-centre on all the road to the frontier.

We have now seen enough, and we go down into the valley which we had shortly before on our right. From small beginnings it eats its way deeper down, and through its shelving labyrinth of small trenches, projections, and hills we descend to the bottom of the Daba valley. The river of the same name is divided into several arms, and carries only 159 cubic feet per second. Camp 468 stood on its left bank below the monastery village.

CHAPTER XXII

A PICTURESQUE MONASTERY

I DECIDED to remain two nights in the camp at Daba. The animals had had no day of rest since we had left Tokchen, and we had to procure provisions at any price. There were no pasture grounds but the juicy barley-fields, so our horses and mules had to be tied up.

First of all I drew a panorama of all the castles, towers, and crenellated walls which turned their fantastic fronts to the lane of the Daba valley, and had been modelled by rain and rivulets in the lowest declivity of the left flank. I had not yet finished when Kutus and Lobsang returned from a first reconnoitring expedition in the village; they had bundles full of rice and *tsamba*, as well as barley for the animals. We were, then, safe from famine in the meantime. They had also found some bad tobacco and filled their pipes at once; at any rate it had a sweeter aroma than the yak-dung they had puffed of late. Several Indian merchants were staying in Daba, and inquiries for provisions should be made at their camps next morning.

Before I was dressed my good fellows had again added to our supplies. Gulam, the cook, beaming with satisfaction, came to show me his booty—half a sack of potatoes, a bag of the small sweet raisins called *kishmish* in Turkestan, a whole apronful of dried plums, two packets of stearin candles, and three plump sheep. We had scarcely ever been so well off since we left Drugub the year before. The potatoes were the best of all. Roasted potatoes and milk

in Daba tasted to me better than oysters and champagne in the Grand Hotel at Stockholm.

Accompanied by my usual satellites, Lobsang and Kutus, I betake myself at seven o'clock to the village, where I spend the whole day till darkness drives me back home. I should like to stay there for a week, for I have never seen subjects so alluring for the brush and so charming for the pencil since I left behind me the temple courts of Tashi-lunpo. The village lies like a bird's nest at the mouth of an extremely short semicircular valley, a niche, or whatever this pocket-like recess may be called. It lies in the pebble terrace amid a forest of stone pyramids and cones separated from one another by vertical clefts often so narrow that a man could not squeeze himself into them. A fissured wall; a background scene of the wildest, grandest sculpture; a row of pillars in several storeys attached to a wall behind; an immense organ with closely crowded pipes. Between the different stages the original horizontal bedding crops out here and there, and it is not hard to perceive that one here is in an æolian district of löss, which owes its fantastic forms to running water.

A wall protects the valley niche on the river-side. Through its gate, with a threshold of roughly hewn beams, we enter a market-place, or perhaps it might be called a broad bazaar street, between two rows of inhabited houses and rural caravanserais. Two *chhortens* stand like enigmatical milestones in the centre of the market, and Daba is beflagged with innumerable streamers which are fixed on a rope stretching over the whole village, so that they flutter blessings and good wishes over traders and cloister brothers in a silent chorus.

Here and there a merchant has set up his tent, while the nomads have piled up in blocks and walls their sacks containing salt from the *tsakas*, the dried-up lakes of western Tibet. Brick tea, sent from Lhasa, seems to be in great demand, and also rice, barley, meal, brown sugar, dried fruits, and other goods from India.

Daba is an emporium of the barter trade in this part of the province of Ngari-korsum or Hundes. Some fifty Hindus, most of them from Niti-rong, a valley lying on the south side of the Niti-la pass, and from Garhwal, had now come to the fair at Daba.

It seemed to me like a whiff of home to hear these copper-brown men from the frontier of India talking together in their language, and I was glad to meet these cheerful heralds of a fairy land, whose palms I longed to see. But what a difference there was between them and my old Tibetans, to whom to my sorrow I must soon bid a long farewell! As regards their build and the form of the head, the features and the dress, as well as regards their language and religion, we are confronted by representatives of a new type, another race. The face is more finely cut, more harmonically drawn, and in better proportion than that of the Tibetans—that is, according to Aryan ideas—and we recognize therein a transition to the pure Indo-Germanic type. The body is more slender and graceful, perhaps an inch or so taller than among the sons of Tibet, who are distinguished by their powerful muscular development, their squat roundish build, their measured, steady, and never hasty movements, the broad Mongolian form of head and massive skull.

These strangers from warmer valleys, with their raven-black hair hanging down in smooth locks, wear a small round skull-cap often ornamented with simple embroidery. Most of them wear long, light-grey kaftans gathered in by a girdle at the waist, narrow trousers fitting closely at the ankles, and low shoes ending in turned-up points. The whole appearance of the Hindu is more delicate and effeminate than that of the Tibetans. The sons of the Land of Snow are men hardened by their struggle against the dread forces of nature and a bitterly cold climate.

Some of the houses in the great market of Daba are more neatly and solidly built than any we have seen since our departure from the town of Shigatse. A broad red or

blue band runs along the top under the roof, and light-blue bands are painted round the windows. The architecture reminds one of Italy. The Daba-dzong, the town hall, or perhaps more correctly the "government house," like that of an Indian town, first attracts our attention. It is a group of buildings painted all over hawthorn red, and its flat roof is decorated with many exorcising streamers and poles with ribands. A *chhorten* before the front indicates that the Daba-dzong is not only the headquarters of the town authorities but is also under the control of the state church. *Dzong* is a secular term. But the red house is also a *labrang*, or the seat of the lama superior of the monastery, who is named Tugden Nima. In Daba we find the same organization as in Selipuk, where the abbot of the monastery also holds in his hands the reins of secular power.

From the market we come into a quadrangular court, where the never-absent dog is chained up and rouses the echo of the rain-carved colonnade of the valley with his furious bark. Another gate, a stone staircase, an ante-chamber. Lay and ecclesiastical servants greet me politely as I enter. A lama invites me to enter the abbot's study, which is also the justice room. I stalk in with my two satellites, and next moment find myself in a larger room with a pillar in the middle, which is fitted up and furnished in the solid Lamaist style we remember so well in the red chamber and other principal monks' cells and priests' dwellings in Tashi-lunpo.

Exactly opposite the entrance sits Tugden Nima, with his back to a large window filled with panes of thin paper through which a subdued light penetrates. Against the light Tugden Nima is seen only as a dark profile, and his features are imperceptible. I can only make out that he wears the toga of a monk and has short hair, and also that letters and documents are piled up among writing materials on a low, lacquered table.

When I had come up to the table I made a slight bow

which the temporal and spiritual judge of Daba returned with an inclination of exactly the same angle. But he did not rise from his divan, which was covered with a mat. He looked with a smile at my weather-beaten features. My face had frequently changed its skin in the rarefied air, and the last integument was tough as parchment and was darkened by the scorching sun of Tibet. He also examined my dress. A Sahib in Tibetan costume! My green velvet cap had once been thought worthy to adorn the head of a Tatar khan; now, from constant changes of rain and sunshine, it had assumed a hue for which language has no name and the colour scale no shade. A brick-red turban scarf was wound round its border. The blood-red kaftan, confined at the waist by a grey girdle, had seen better days. In honour of Tugden Nima I had put on Mongolian leather boots with strong thick soles. The satellites were in every respect worthy of their master. Ragged from top to toe, Kutus could not expect to be taken for anything but a genuine vagabond from Ladak. Lobsang wore a kaftan of the same kind as mine, but fresher in colour, for it had been made in Tokchen.

"Sit down, Sahib," said Tugden Nima after he had surveyed long enough the far-travelled wanderer who had come so unexpectedly into his room. Some lamas, silent and motionless as pillars, Hindus and Tibetan laymen, lined the walls watching attentively to see what would happen. Tugden Nima had a pleasant face and good manners, and he was friendly towards us from the first, not coarse and repellent like the monks of Dongbo.

"I have heard of you, Sahib, and I know that you sailed over Tso-mavang in a boat. Singular that you came off with your life from such an exploit. You might have aroused the wrath of the gods, and I suspect that you were exposed to danger more than once, were you not?"

"Certainly, storm often overtook us, and the boat was cast ashore by the waves. But if I had displeased the gods

I should not now be sitting on a divan and talking to you, Tugden Nima."

"You are a friend of the Panchen Rinpoche in Tashi-lunpo—that explains everything. And I have also heard that you have visited many monasteries, and have consorted with the monks on a friendly and confidential footing. Which monasteries have you seen?"

I took a good drink from my tea-cup, and then gave him the whole list, from Tashi-lunpo to Tirtapuri.

"You have seen more of them than I," he exclaimed.

"Now, tell me something about yourself," I asked, when the string of his tongue was loosed, and he had shown himself to be a good-tempered and sympathetic, as well as a well-informed and interesting man. . .

"Where stood the tent of your mother when you were born, how old are you, where did you spend your youth, and what are you doing here?"

"I was born in Lhasa, and at a very early age entered the Sera monastery as a novice. I am now 40 years old, and I have been chosen by the Devashung to put in order and manage the affairs of Daba-dzong. I have, then, as you must have seen from the papers on the table, quite enough to do, and you must excuse me if I cannot give you as much of my time as I should like. You wish to see the monastery. A lama has already been ordered to show you everything. Let me know if I can do anything else for you."

When I had thanked him for his kindness, he said, suddenly:

"This is a lucky year. You have seen how it has rained. The harvest will turn out well, the grass is shooting up in the valleys and the nomads will have a good winter. You know, of course, the great water festival in Lhasa, from hearsay at least? Well, when the rains fail this festival is held with great state to mollify the heavens. This year the water festival will be a simpler ceremony, for the rain is coming of itself."

I understood his meaning; we too know that

> When the Devil was sick, the Devil a monk would be;
> When the Devil was well, the devil a monk was he!

Our conversation was interrupted by some Hindu merchants and their Tibetan customers, who had fallen into a dispute about a commercial bargain. Tugden Nima, the judge, not the abbot, waited in silence until the contending parties had exhausted the whole stock of ugly words the Tibetan language contains.

Meanwhile I could look a little round the room, which, after the desolate regions where I had lived for so many months, seemed palatial. The walls were covered with Chinese paintings on paper, and bookshelves almost breaking under the weight of the holy scriptures. On the altar table small statues of the gods smiled in silver and copper cases, and the light of flickering flames burning in bowls fell on their faces. The usual Lamaist furnishings, the bells, *dorches* or thunderbolts of brass, the prayer-mill and other religious objects, were also present. Over the door hung a portrait of the Emperor William, a coloured print, which had somehow found its way to Daba-dzong.

But both Tugden Nima and myself had other things to think of, so I rose, took my leave and went out to the market, where I was again most unexpectedly reminded of Germany. A Hindu came to me, bowed and said:

"Salaam, Sahib. Will you take me into your service? I have been employed by Europeans before."

"No, thank you; I have just sent off six servants, and I do not want any more."

"Do take me! I will show you a testimonial given me by a European whom I served a long time."

And with that he brought out a folded yellow paper. I read it quickly through, and then asked him, "How old are you?"

"Forty years."

"Well, this testimonial was written fifty-three years ago, according to its date."

"Yes, you see, it was my brother who actually received it, and he is much older than I."

"If you will sell me the testimonial, you can make a few rupees by it."

"No, Sahib, I will not sell it; it is a very valuable document."

He was right. I would have kept it as an autograph. It contained a few lines of thanks in English to a certain Mance, who had provided a European expedition with excellent sturdy coolies. And the classical names subscribed below were "Adolph and Robert Schlagintweit, Badinath, September 5, 1855." The testimonial had therefore been drawn up two years before the murder of Adolph Schlagintweit in Kashgar.

Now we toil up a narrow steep gully in the freakish slope of the pebble bed to reach the level terrace in front of Daba-gompa. An old lama comes to meet us; he is charged to show us the monastery and the temple halls. First he conducts us into a forecourt, partly roofed over. Here we see the usual arrangement, the portal of the *lhakang*, with its red door panels decorated with iron and brass mounts, the blue pillars attached to the wall on the sides, and yellow and pink draperies above.

The lama is about to unlock the door and take us in, but I restrain him and take out my sketch-book and small paint-box. The portal and its surroundings are too interesting. The four spirit kings are at their posts. The figures are coarsely painted, with little art, and, judged by the faded colouring and the gaps caused by the fall of the distemper, fairly old. In the corner to the left lie heaps of discarded streamers, temple draperies, *kadakhs* and strips of coloured cloth all dusty and time-worn, torn by the winds of the highlands or bleached by burning sun. A cracked drum stands silent in its stand; a rotten table can no longer bear the weight of heavy images; two stools which

have lost a leg are left to perish, and some temple vessels of copper and brass can no longer resist verdigris and corruption.

Now the red doors are opened and the mouldy close darkness of the *lhakang* or *chamkang*, as this, the principal hall of the gods is called, stands before us. *Chhortens* are erected on either side of a Chamba statue, the one on the left called Pöchöge-kudung, the other on the right covered with gold. Other images are faultlessly arranged in regular ranks on tables and shelves between vessels for offerings and lamp-bowls. The truths of Lamaism lie on dark sheets of paper between their old wooden covers, wrapped in green and blue cloths. The holy legends are to be read in coloured pictures amid a forest of *tankas*, and the usual strips of cloth are wound round the pillars.

A smaller hall is called *Lama-lhakang*, after Yabyan Shin Tibi, a priest who is supposed to have founded the monastery at the time when the walls of Tashi-lunpo were reared. However that may be, his ashes are said to be contained in the large *chhorten*, Lami-kudung, which stands in the middle of the hall. Sitting statues of Tsong Kapa, three feet high, protect the dust of the deceased saint, and the reformer can enjoy the sight of coloured artificial flowers in vases. Here, too, stand cast idols in close rows, and among the temple vessels four silver beakers with one foot are conspicuous.

I have very great doubts whether my honest Lobsang is strong in the faith. But he might be seen humbly making his rounds in the terrestrial Valhalla of Lamaism, and throwing himself down before every one of these golden idols, so that his forehead touched the floor of hard-stamped clay. He even begged our lama to be allowed to keep a *kadakh* that he might have a good journey to India in its blessed atmosphere. My dear Lobsang was much too sound in mind to believe in this hocus-pocus. But he did not wish to hurt the feelings of the old lama,

so" he observed the outward forms and practices of the religion he had inherited from his parents.

A third temple, the *dukang*, was closed, and the lama who had the key happened to be in one of the adjacent valleys, looking after the salvation of a dying nomad to the best of his ability.

Daba-gompa belongs to the Gelugpa sect, and its brotherhood consists of fifteen monks. They are of the Gelong and Getsul orders, and only Tugden Nima has attained the rank of Kanpo Lama.

Though it is small, the monastery vividly reminds me of Tashi-lunpo. Here also we find a collection of stone houses, which produce a pleasing effect. The walls are painted red, here and there relieved by white panels. The *chamkang* is covered with a roof jutting out into curved angles after the Chinese style. The greater part of its original gilding has been washed away by the monsoon rains. Streamers flutter on the roofs, and bells hang at all the projecting corners with feathers tied to their clappers. The slightest breeze that breathes over Daba-gompa calls forth from this carillon a melodious symphony that speaks of peace.

How willingly we linger by the hour in this remarkable picturesque monastery! From whichever side we behold it new surprises meet our eyes. Like eagles' eyries, a row of white houses with red and blue friezes and window frames hangs above the village down in the valley; in them are the cells of the yellow confraternity. The greyish yellow pebble terrace with its countless shafts and pyramids makes an effective background to the particoloured houses. The parts illumined by the sun stand out sharp and strong, while the shadows are faint owing to the reflexion from all sides; only the deeply-eroded vertical furrows between the pillars are black.

Now summer reigns in the Daba valley. Summer is the time of life and movement. Then the Hindus of Niti-rong bring their goods over the mountains and trade in

the fair of the Tibetans. During late autumn life gradually declines. Then follows winter when the Himalayan passes are closed, and, cut off from communications, Daba is left in solitude. The cloister brothers spend their lonely days in the white houses and hold services in the dim temple halls. They see the snow fall in thick flakes, and listen to the mystical dialogue between the wind and the bells. But the noisy chatter of the rocky bed and the Sutlej, their Langchen-kamba or Elephant river, does not reach their ears.

Evening draws on and we begin the descent, but we must linger once more at the steep wall where half a dozen *chhortens* of fine and stately form stand, having an air of antiquity owing to the commencement of decay. A cubical foundation with plinth and ornamentation bears a contracted cupola with an onion-shaped turret ending in a gilded crescent encircling a disc. They are painted red, white, and greyish-blue, and on the sides two horses are portrayed.

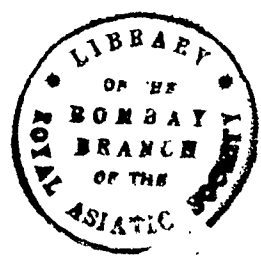
The shades of evening fall early on the village of Daba; a pale light illumines the façades and groups of houses, while the eastern side of the valley is lighted up a little longer by the rays of the setting sun.

The Hindus have their regular abode just opposite Daba-dzong, in a small house with an open platform in the court in front of the building. There the men from Niti were assembled, and their expressive songs charmed our ears as we went home in the twilight.

"Come up to us for a time, Sahib, listen to our songs, and watch the dances," one of our new friends asked us. Very gladly. A carpet was laid down for me, and as a gift of welcome two dishes were handed to me piled up with grains of rice and sugar, which I more than paid for in cash. Two men sang some unintelligible words, accompanying themselves on drums which looked like hour-glasses, and which they beat with their fingers. In front of them a pretty brown young maiden, with smoothly combed black

hair, black dreamy eyes, and silver rings in her nostrils, danced a whirling circling dance. She had thrown a pink transparent veil carelessly over her hair, and wore a black jacket, a white skirt which stood out from her hips like an open parasol, and closely fitting trousers tied round the ankles. Her prettily formed bare feet turned round swiftly and gracefully in the dance.

The darkness came down on us. The camp-fire spread a bright light down by the bank. All the poor of Daba waited patiently for my return, and received small presents. Lastly, Suen danced round the fire, and the songs of the Ladakis sounded cheerfully in the cold valley.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CHAPTER XXIII

IN THE SANCTUARY OF THE MANGNANG MONASTERY

THOUGH Simla lies almost due west of Daba, the road runs for several days' march to the north and north-west, and passes along tributaries between regions which are quite impassable for man and beast. There is no possibility of advancing along the shortest way marked out by the Sutlej. We remember the appearance of the river bed below the monastery Kyung-lung. The irresistible mass of water dashed with a deafening roar between vertical and overhanging cliffs of solid rock. We must cross the Sutlej four times more before we come to Simla, and at every crossing we shall gain a fresh insight into the secrets of the remarkable valley. Where the rocks reach out towards each other, and where the river, narrow and squeezed together, tumbles between them, there only has it been possible to construct a bridge, and only there do we see the Elephant river. Its rule, however, extends over the whole Himalayan region which we traverse.

A short distance between the cliffs on either side is not the only condition demanded for bridging over the river. Such places are numerous. We may be sure that the Sutlej flows all the way in a deep trough. Wet shining ramparts of rock descend from colossal heights to its banks. Long reaches of the river have never been seen by human eye. The wild sheep can find no way to them, and the chamois has nothing to attract him thither. Only rock pigeons, falcons, and eagles know the deep, shady, and cold vault-like corridors where the river tosses without

rest or pause. No, the Tibetan road and river engineering corps demands also for bridge-building that the shore supports of the bridge-head shall lie only a few feet above the water, for usually the road follows the valleys of tributaries and avoids all ridges and crests that are difficult of access.

On the road to Daba we are during two days' journey at a distance of six to ten miles from the Sutlej, and not till the third day do we approach the river at a sharp angle. But even the smallest side valley is imbued with its spirit. The rain of the south-west monsoon, which washes these rocks and terraces, is tributary to the Sutlej and is bound to trace back the course of this river from its own home, the Indian Ocean. During our journey I always longed to see the main river, but had to patiently wind along the terrible detours between the bridges.

The mountain land south of the Sutlej is Hundes proper; Chumurti lies north of the river. Both are characterized by their cañons, their fearfully wild vertical sculpture. The Ladak and the Zaskar ranges gradually diverge, and therefore the affluents become longer, and probably on the whole more voluminous. After a single traverse, however, no law can be laid down as regards this. The rain is unequally distributed. A small tributary may rise until it overflows after sharp local downpours, and a larger one may fall considerably after a couple of bright days.

From Daba we have to mount again up to the heights which separate us from the next side valley. The road crawls up the gully cut out in the terraces just above the village. Consequently the friendly monastery vanishes out of sight at once, as we turn northwards into such a steep trench that the loads are always slipping off as the animals struggle up. The men push behind, shouting and whistling. Yonder one of our horses has stopped with his load hanging under his belly, and a long halt follows. Two minutes more and another load is almost off. The soil of this torrent bed, only six feet wide, is yellow clay, so

that we are nearly choked with the dust the animals kick up. On either side pillars and blocks of rolled stone, 60-100 feet high, rise perpendicularly or hang over in a threatening manner. Now we do fairly well, but this road must be delightful after continuous rain. Then there is danger of being struck down by falling stones and boulders, then the viscous plastic clay is smooth as soap, then neither man nor beast can keep his feet, and if any one falls he slides with alarming rapidity down to the bottom of a grand toboggan.

Scarcely have we reached the top when the path, perhaps the most capricious in the world, takes us down again into a gully which opens into a medium-sized valley. A small brook trickles down its bed. There is no wind here. A touch of the sun of India lies over this desolate disintegrated country. Horses and mules make for the brook to drink. The men scoop up water with their hands and pour it over their heads and faces.

After thus refreshing ourselves, we ascend another rolling mountain, but only to plunge down again into the next valley. This, too, is watered by a rivulet which has produced a narrow strip of grass. Ruins of old houses, a row of *chhortens*, two small barley-fields and a brook are the sights of the next valley. Then follows a labyrinth of small valleys and furrows, an inextricable confusion of all kinds of troughs, some of which we cross right over, and others come in contact with only at their heads where they are not cut deeply into the ground. A larger dale winds off north-eastwards, and the descent into it is so steep that two loads slip over the heads of the animals, which have to stand with their noses to the ground until help comes.

A last rise separated us from the valley Manlung, where we had had enough for one day. Here also stood a hut to protect the barley on the fields which are watered by a rivulet from a spring. I would have travelled farther but I yielded to my men's desire for rest. The good living in Daba had made them heavy and lazy; of course they

had eaten as much *tsamba* and mutton as they could force down and a little more.

Just at mid-day the sun was burning hot, but half an hour later the sky grew dark in the south and the monsoon again drove heavy masses of cloud over the Himalayas. A distant murmur is heard; it becomes louder; a hailstorm comes; it rushes down upon us, and the air is immediately cool and fresh. As soon as the hail is over steady rain commences. We had been warned at Daba of the Mangnang-tsangpo. This river swells up after heavy rain so that it cannot be forded. It would be pleasant if, on reaching its bank, we had to stop waiting for days, when we were so anxious to reach India.

August 12 broke clear after a minimum of 45° in the night. The rain had cooled the air and the Mangnang-tsangpo would not prove an obstacle to our march. As usual we had to climb a steep slope; we always camp at the bottom of a valley and travel straight across innumerable valleys. Another chaos of troughs and then a rapid descent between yellow colonnades carved out fantastically in the detritus down into the narrow Anggong valley, where a brook is ensconced between grassy banks.

A horseman flies past us without answering when we inquire his destination. A second follows at a quick trot, his saddle-bags bulged out with their contents. He, too, has no intention of detaining us. The destination of both is evidently Totling. Perhaps this large convent is the stone in our way which will trip us up. At Tokchen the authorities wished to drive us back into the interior of the country. We must wait and see if the men of Totling have the assurance to do the same, so near the frontier.

The small Anggong brook soon enters the large Mangnang valley, and even from the junction of the two valleys we can hear in the distance the roar of a great river. We make a circuit to the left and south-west and cross many waterless but still wet beds, with their banks sparsely begrown with bushes. The river with its rapid raging

current and its breadth of 72 yards was formidable, but it was easy to ford at a place where its 700 cubic feet of water was distributed among four arms. We had now passed 8500 cubic feet of water in the tributaries of the Sutlej. With the addition of the water running in on the opposite side the Sutlej must here carry 16,000 or even 17,500 cubic feet.

Glad to have the obstacle we had been warned of safely behind us, we pitched camp 470 on a meadow by the left bank close to the monastery Mangnang-gompa, which, curiously enough, is built on the level valley floor and not on the heights above, as is the case with most convents. It is eleven o'clock, and we have the day before us. Little we care though thunder rolls among the Himalayas and heavy clouds congregate in dark blue cumuli over the southern mountains. We shall be caught by the first drops, but it is only a couple of strides to the forecourt of the monastery. Just as we have got under cover the rain begins and pelts all day on to the ground.

The village of Mangnang contains three or four simple huts surrounded by walls, and stands in the midst of larger and more thriving barley-fields than we have hitherto seen. In five weeks the scythe will sever the corn, and the crop is sure for this year, even if the rain stops altogether. Ten days ago the river was much swollen and could not be forded without danger. The distance to its source on the slopes of the snow-clad mountains of the Gangman-gangri is reckoned to be three short days' marches.

We are at a height of 13,176 feet, and are 1880 feet lower than the Rakas-tal lake. Here we come to the upper limit of arboreal vegetation, and we greet the first heralds of the Himalayan forests in the form of a green grove of a dozen leafy poplars beside the village. If the whole country as far as sight can reach were not overshadowed by rain-clouds, I would have my tent set up under the crowns of the trees; I should delight in the pale green subdued light that filters through the foliage, and would listen to the

rustle of twigs and leaves that seems to speak of home. The traveller from India here takes leave of the last grove, and never sees a tree again till he comes to Ladse-dzong and Ye-shung in the far east, or to Chushul and Tankse, if he marches westwards. But if he directs his steps northwards, through Chang-tang, he finds the shadow of a tree only when he reaches the oases of Eastern Turkestan.

Mangnang-changchugling-gompa, what a charming, appropriate name for a hermitage where the days are long and there is time enough to spare! The monastery turns its rose-coloured walls to the outer world, and the stranger is agreeably surprised to find a large, richly-decorated *lhakang* within. Eight pillars of sound timber support the roof, and in the nave between them we see for the fiftieth time the red divans on which the monks sit cross-legged as they murmur their prayers during the services. The prior has a special seat at the upper end of the row. Hangings, painted banners and pennants hang from the ceiling and pillars like trophies of a holy war. The theological library consists of the *Kanjur* scriptures, while the 208 folios of the *Tanjur* are only found in monasteries of the rank of Totling-gompa. Fresco paintings in fresh sober colours cover the walls, and the pictures exhibit an artistic sense that is not without merit.

A host of 330 divine images is placed on the altar table. There we see Tsong Kapa in three copies, all adorned with cloth caps. They are made of brass, but the dust of years and the smoke of guttering butter wicks have covered them with a black film. The monks of the monastery asserted that these images had been made on the spot by a lama skilled in metal work, but this statement is doubtful. Perhaps he only repaired some broken images.

Above all the rest and behind them a huge rosy red statue of Buddha stands in the shaft of light from the impluvium. His eyes stare into the hall, his lips are

swollen, his cheeks stand out, and his long ears are partly covered with a veil. His hands he holds laid palm to palm as if in prayer, but they are entirely hidden in a *kadakh*, the offering of pious pilgrims. A subdued light, contrasting with the gloom which prevails in the hall, falls on his face, a gleam of the Nirvana in which the unapproachable princely son of the Sakya tribe dreams in solemn silent repose.

"Let me buy some of your gods," I begged one of the monks who showed the deities.

"You would be welcome to do so if every article in the Mangnang *lhakang* were not ticketed with a number, which is entered in the inventory of the monastery. A strict check is kept; and when a new prior comes he at once inspects all the movable property of the monastery and looks if anything is wanting. If anything has been taken away his predecessor must replace it. Therefore we cannot sell you the smallest cloth."

Red, yellow, and brown cloths covered the front of the altar table. Only the boldly carved feet on which the table rests were visible; two brazen cymbals, an important instrument in church music, leaned against them. Lamps burned not before the altar table but on a table at one side. New wicks were placed in the butter, all the bowls were filled with grains of rice and water, and the brazen vessels shone like gold. A cloister brother was sweeping the earthen floor, but was kind enough to stop when I asked him to let the dust settle a while. On the outer court also besoms were flying about.

"You are surely preparing for a festival?" I asked.

"No, we are expecting a Kanpo Lama from Lhasa. He is to relieve the prior of Totling, whose four years of service are at an end. On his journey thither the new prior inspects all the monasteries on the road through Ngari-khorsum, so we sweep and clean inside and out to give a good impression."

"But you keep the yearly church festivals in Mangnang?"

" " No ; for the great festivals we go, like the lamas of Daba and Dongbo, to Totling."

" To which mother cloister is Mangnang affiliated ? "

" The Brebung monastery near Lhasa."

" But you belong to Tsong Kapa's yellow sect, the Gelugpa ? "

" Yes, certainly."

To the red carved door-posts in the antechamber, the *Dukang-gumchor*, some small bronze gods, were irreverently hung by strings, an arrangement I have never seen elsewhere. The four spirit kings, called collectively Galchen Dirgi, are represented on the walls with force and elegance.

I sat for hours, painting in water-colours, in the *lhakang* of Mangnang, where silence hovered with motionless wings over the assemblage of deities. Subdued colours, dreamy eyes, gently smiling lips ; trombones and drums which could make a noise but were now dumb ; a spider lazily climbing up its thread which hung down from the ceiling —all had a soporific effect on my senses. Outside was heard the swish of the steadily falling rain. Lobsang, who had held a long conversation with a lama, at last fell asleep, and slumbered like an innocent child, leaning against a pillar and sitting with wide-spread legs on a divan, properly intended for use in divine service. He dreamed of the fearful winter in Chang-tang, which lay behind us, or of the summer of India, to which we drew nearer every day. His deep breathing made the silence still more striking. I seemed as though shut up in a burial vault waiting until the breathing was over that I too might fall asleep. Why did not ghostly forms come forth from the dark corners of the temple hall ? Why did not the divinities in the mural paintings step down and execute incantation dances before the altar ? Eternal Buddha, unfathomable deity on thy throne in the cup of the lotus flower, why didst thou not utter words of wisdom in this sanctuary erected in thine honour ?

My eyes turn from the haloes of the gods to the brush

and paper. I look round. Lobsang's head is nearly slipping off its resting-place, and he sleeps with open mouth as soundly as a dormouse. The lama, with whom he had been talking, sits upright, and in silence lets the beads of his rosary slip through his fingers. I begin unconsciously to whistle, as though to give a rhythmical swing to my sketching. But then the lama rises, comes gently up, and begs me not to disturb the peace of the sanctuary.

The light that falls on Buddha's face grows fainter, for the evening advances with rapid strides.

"Good morning, Lobsang!" I call out so loudly that the lama, but just now motionless as Buddha, starts and drops his rosary. Lobsang yawns and rubs his eyes. We go out into the rain.

"Who rest here?" I ask our lama as we pass by some large *chhortens*.

"Monks of high rank who have died and been cremated in Mangnang."

He tells me that after the bodies have been consumed on the pyres the ashes are mixed with moist clay and kneaded into small figures called *tsatsa*, which are of the form of a cylinder and a cone in one. On every *tsatsa*, while it is still moist, some sacred word or sentence is printed with a stamp. The ashes of a dead man suffice to make a couple of thousand *tsatsa*, which are deposited in a hollow of the solid base of the *chhorten*. This *chhorten* is therefore the grave of the dead man as well as his monument.

Darkness descends on Mangnang, and soon the shadows of night draw their veil over the countenance of Buddha. Some poor small children, only half-clothed in rags, accompany me down to the camp to get a piece of bread and a copper. And then night opens its arms to receive cenobites and pilgrims, and we for some hours wander through the fairyland of dreams and oblivion.

CHAPTER XXIV

HIS EXCELLENCY THE CHURL

IMMEDIATELY below the cloister village the road winds up three sharply marked terraces which all indicate former levels of the valley of the tributary. Up on the top the road takes a bend to north and north-east; it is tiresome, when Simla lies to the west. But the road must accommodate itself to the configuration of the country and creep through where the land presents no insurmountable obstacles.

Suddenly our small party comes to a halt on the edge of a fearfully deep valley, a cañon which is one of the right-hand branches of a whole system of gigantic erosion troughs. From the edge we look down perpendicularly into a dizzy depth of several hundred yards. The whole precipice is seen foreshortened, and we get an excellent notion of its different beds of varying thickness, vertical where the material is hard, and with a very slanting dip where it is looser; down at the bottom the last detritus fan passes into the floor of the narrow channel. The uppermost layer on which we stand consists of a bed of reddish-brown detritus 16 feet thick. The wind blows over its level surface and its sides are vertical. From one convenient spot we can catch a glimpse of its lower limit, for the underlying bed of yellow clay is softer and more easily attacked by denudation. The detritus bed, therefore, projects forward like a cornice from which loosened blocks threaten to fall at any moment.

On the top from which the descent commences we are

at an absolute height of 13,176 feet. The scene before our eyes is truly wonderful, and no pen can describe its extraordinary forms. A yellow map is unrolled beneath our feet; a labyrinth of deep, precipitous erosion valleys, corridors, and trenches, separated by wedge-shaped blocks of pebble and clay. Thanks to the expansion round Totling, the Sutlej is visible to the north, but at this distance its line of foaming rapids looks only like a fine thread. We think we can perceive that below Totling and Tsaparang, which cannot be distinguished at so great a distance, the Sutlej valley again contracts to a narrow ravine. But where does the path run? Is it possible to get down through this maze and along these declivities without breaking a limb?

From the point on the edge where the cairn stands we plunge down headlong. The scene changes at every bend of this sharply winding zigzag path. We slide down slopes, creep almost all round hillocks and boulders, nay, must often toil up again to find a less steep descent, and then go down once more. On the whole the path runs north-west, though at times we are walking south-east—indeed, towards all points of the compass.

The spacious landscape we have seen from the top vanishes at once when we are buried in the deep cañon excavated with fantastic irregularity in a typical deposit of löss. We are, therefore, enclosed between yellow precipitous walls of clay, and regard with astonishment a confusion of yellow towers, walls, and castles standing, as it were, in the narrow lane of an enchanted town.

Now the path lies like a narrow shelf on a precipitous slope and below us yawns a dry ravine. The fine powdery dust rises in yellow clouds behind the hoofs of our animals. This road is impassable after rain. We were afterwards told so at Totling, but we could see ourselves that it must be so. On all sides there are perfect tobogganing slides. How slippery they must be when all this clay is wet!

The free outlook we enjoyed on the shelf was lost again

when the road crept down into a very deep trough between walls of löss 100 feet high. Loose dust lay on the bottom, on which we seemed to walk as on eiderdown cushions. Above our heads only a narrow strip of sky was visible.

Then it grows lighter again. On the left the wall of clay is still perpendicular, but it is interrupted on the right, or is replaced, by a row of yellow pillars and cubical blocks forming a loggia, a gallery, which affords through its loop-holes a view over the Sutlej valley. How often I should like to stop and sketch on the way! But it is better to hurry on. The sky is dull, rain may come, and then we should be stuck fast.

Now we bend round an isolated conical hill and crawl along a ridge between two trenches. The next moment we cross some trenches. We walk up and down hill, to right and left, through dust and vapour. The animals manage splendidly. The loads slip off only twice, causing stoppages.

Step by step we work our way down through the löss bed, coming to older and older horizons of the immense filled-up basin. In two hours we have moved down deposits which must have taken at least ten thousand years to accumulate. We have gained a grand insight into the work of the forces of denudation and accumulation during earlier periods.

The bed of detritus above, which covers the whole as with a mantle, must certainly increase in thickness towards the foot of the mountains and thin out towards the Sutlej. Under this bed we see a series of different deposits, and at the bottom of all occurs rock *in situ*, which, however, crops out only on the banks of the Sutlej.

If we could clear away all this loose alluvium, we should see a flat open strath between the Ayi-la in the northern, and the Gangman-gangri in the southern, mountains with a breadth of 60 miles. Such was this country in a remote period when an alteration took place in the climate, transforming everything. The climate became dry, precipitation

almost ceased, the highlands were converted into steppe, but the wind continued its dance over the wilderness. On its wings it bore along the fine dust weathered from the mountains, which by degrees fell to the earth and formed æolian deposits. It was long before the trough valley was filled up with a thickness of many hundred feet. But when this filling up was complete, Hundes had a form of surface exactly of the same kind as the basins of China and Mongolia, which are filled up with dust borne by the wind and which Richthofen calls "*lössmulden.*"

Such a hollow may be closed in on all sides and have no drainage. Then all the solid matter carried by wind and water to its centre remains within its bounds. But if it has an outlet to the sea, like the Sutlej valley, erosion and running water exercise their force when the time is ripe.

And in the Sutlej valley the water has again acquired its rights. A new change of climate occurred, this time from drought to abundant precipitation. The transition must have extended through thousands of years. The precipitation increased slowly and steadily, perhaps with periodical interruptions. At last the south-west monsoon flooded the Himalayas with extraordinarily heavy deluges of rain. The water collected into mighty rivers which cut their channels vertically through the löss deposits of the steppe period. The result is the wild dissected cañon country we have around us on all sides.

The thorough change of climatic conditions which in Hundes and in many other parts of Asia exhibited itself as a pluvial period with abundant precipitation, produced in more northern regions the Great Ice Age, when Scandinavia and extensive areas of northern Europe lay under a mantle of ice. The pluvial period has left conspicuous traces, and not in Hundes only; the huge terraces on the banks of the Indus and the concentric beach lines round all the salt lakes of Tibet are memorials of this period. Then Manasarowar and Rakas-tal were filled to overflowing, and the upper Sutlej streamed through them

constantly. But the inland ice retreated northwards and disappeared at the time when the rainfall diminished on the Himalayas. It seems as though the climate in the present period were tending towards greater dryness. We have seen that the Sutlej was cut off from Rakas-tal barely a century ago, though this event may very well be only a moment in a period.

Step by step and turn after turn we have worked our way down the steep walls; at length only a succession of round flat hills remain before we can ride on over level or slightly undulating ground. A streamer cairn on one of the last hills announces the proximity of Totling-gompa. Now the sharply limited quadrangular cloister town appears on the left bank of the Sutlej. Is it possible? A town in this unproductive country all of yellow clay! Yes, truly; yonder we see the crowded temple buildings surmounted by Chinese roofs and the tall *chhortens*, the emblems of transitoriness and recollection. These ancient weather-worn memorial stones of Lamaism speak of neglect and decay. Tottering houses still defy time among the ruins of others which have long fallen in. The red-painted monastery buildings bear the marks of rain, frost, and sun, and poverty peers out from the holes and chinks of the dilapidated walls, to announce to the stranger that Totling's period of grandeur is now only a tradition.

The monastery town is built on a terrace perhaps 60 feet above the level of the Sutlej. At the foot of this terrace the dirty grey eddies of the great broad river roll along with a much slower speed than at the last place we heard their roar. A mile and a quarter higher we can just descry the narrow, sharply cut, rocky portal from which the river emerges, foaming and turbulent, into the expansion at Totling. This is one of the places where the Sutlej rests on its journey. But the royal river longs for more deeds of heroism. Immediately below Tsaparang it renews its furious combat with the rocks.

As the most noted and perhaps also the largest of the

ecclesiastical strongholds of Tibet, Totling should have shown itself off on our arrival by a grand procession of its monks, clothed in red togas, and marching along as solemn and dignified as Roman senators. But not a priest was to be seen; no children of the poorer classes played among the ruins; no horse stood tied up before a cloister cell. Were the monks afraid of us? Very well, we would look them up. Not that I had anything to say to them, but when fate had brought me to Totling, why should I neglect the opportunity of obtaining a general impression and a remembrance of its temple halls to take back with me home?

But look, there are three monks standing in a corner. Cool and unembarrassed as usual, and with both hands clasped behind his back, Lobsang walks up to them and asks:

"Have you heard whether a messenger is come from Gartok? Our Sahib expects one from Thakur Jai Chand."

"We do not keep a look-out for your messenger," a lama answered drily and coldly.

"Whose is the white tent that stands yonder outside the village?"

"Go and find out for yourself."

With imperturbable composure Lobsang turns his back on the priests. Our friend, Samye Karmo, who is now staying in Totling, but keeps out of our way, has evidently announced that we were on the way and were travelling without a passport. The monastery authorities are therefore prepared, and have put themselves in a state of defence.

Two roads meet at Totling, the one along which we have travelled from Tirtapuri, and the highroad from Gartok to Simla. The latter is open for trade between India and Tibet, and Totling is consequently an important place, and its authorities are wont to exercise control over travellers. I had a premonition that this place might be a stone of stumbling to us, and the conduct of the only three monks we had seen promised nothing good. It seemed as though

the lay and clerical inhabitants of the village had received orders not to show themselves to us. The authorities would wait to see what we on our part meditated doing. The three monks were only spies who wished to find out what we looked like at a little distance.

The caravan pitched camp 471 at the foot of the terrace on the river-bank. I remained above with my satellites and my sketch-book. After looking about in vain for a suitable guide, we passed through two gates into an open irregular court faced by several temple buildings and dwelling-houses. It was no use to be nice about our seats on this ground bestrewn with dirt and sweepings. I had to sit somewhere in order to draw a portal with a projecting balcony supported by pillars and adorned with painted figures in many colours. Monks, novices, and lay attendants peeped through windows and loopholes and crawled one after another from their dens to observe more closely this impudent proceeding.

What a priesthood! So dirty, so uncivilized, and so unapproachable! Water they never thought of, though the proud Sutlej flowed just under their noses. Their bodies were covered with rags ripe for the dust-heap. The togas, once red, hung round them in dark greasy tatters, harbouring dirt and vermin. The inhabitants of Totling are as wretched and debased as those of the monastery. It was no more than I had expected of this frontier fortress of religion on the highroad in western Tibet.

They stand in a compact group, silent and motionless, and their eyes follow my pencil attentively. If I address a question to them, they do not answer; if I press them, they say they do not know; if I ask them to sell us a sheep or some *tsamba*, they shake their heads in refusal; if I ask to speak with the prior, they only laugh scornfully; and if I order them to open the doors of the temple hall, they shrug their shoulders and go away. I had never met with such unfriendly monks before except in Targyaling, Lunkar,

and Dongbo. And I should like to add that such passive stand-offishness is the extreme form of unfriendliness lamas ever display. They never give way to abusive words and insults. At any rate I have never met with blackguardly treatment in Tibet.

I get up and walk to the *labrang*, a large house of several storeys. Its windows and balconies are like those of Tashilunpo and, like them, are partially hidden under black curtains with horizontal white stripes. An Indian trader, the owner of the white tent, salutes me politely.

"Have you heard whether a messenger from Gartok is waiting for me here?"

"No, Sahib; if one had come, I should certainly have heard."

"Have you any edibles to sell?"

"No, Sahib; but if you like to buy a hundred cigarettes, the last I have, you are welcome to them."

I was glad to do so, for my tobacco was at an end.

I had just finished the outlines of the façade, sketched in two balconies and was engaged at a third, when a servant came out of the door, walked straight up to me, and said:

"Come with me up into the *labrang*."

"Certainly. Does the Kanpo Lama wish to speak to me?"

"No, the prior is not at home; he has been living for some days in a tent outside the monastery."

"Who is it, then, who wishes to see me?"

"The Changtsö."

We now learn that this potentate is a kind of superintendent of the secular and business affairs of the monastery, and has his office up a staircase in the *labrang*.

I left off drawing, and with my men followed the messenger up the stairs and through a dark passage to a small long room with a paper window looking out into the monastery court.

Here sits His Excellency, the Changtsö, on a divan behind a red lacquered table and a brass-bound box. He

sits like a stern inflexible judge, and seems to be waiting until the criminal is brought before him. I think I see him now; his portrait is indelibly impressed on my memory. I feel that I am smiling at this ridiculous figure, this fat, sleek, and wrathful spirit-king in human form, who sits before me so arrogant and so puffed up like a bull-frog, ready to keep off any demons or Europeans from the sacred halls of Totling by his grim and awful countenance.

"The substratum of the Changtsö was concealed by the table and chest, and the rest of his sleek body shone with fat and grease. He had a violet vest drawn over his shoulders, which left a pair of fat arms exposed; a Chinese skull-cap surmounted his bullet-shaped head. His brows were knitted in deep wrinkles, and beneath his forelock his eyes flashed with ire. His nose was as round as a potato, and his lips were fleshy—what juicy curses could pour out of them! His cheeks were as full as those of a trumpeting angel, and beautified by thin grey whiskers, which had an indescribably comical effect in a country of beardless men. Yes, there he sat, the Changtsö, and I stood before him in Tibetan costume, but with folders on my nose, and felt at the moment farther from India than on the day I set out from Tokchen.

"Aha, you old scoundrel!" I thought to myself; "you may make a show of your power and authority for a time, but you will have to knuckle down in the end. You do not bend your head, you give me no word of greeting, you do not invite me to take a seat on the ragged cushion in the window. All right; I will sit down for all that, for I, too, can be bumptious when necessary, and it is no use your trying to cow me with your greyish-brown, red-rimmed, rolling eyes."

Lobsang and Kutus, who at my orders sat themselves down at the door, felt very small in the presence of this churl. But I felt inclined for sport and had no intention of suppressing my feelings. Look out, Changtsö! Tibet is all behind me, and I have only a few days' journey more

to the Indian frontier. Try to scare me back to Gartok, if you can. By the earrings of Sakya-toba, you shall not succeed.

The spirit-king began his interrogation. I had expected a voice which would roll like thunder through the small chamber, but he spoke in a low tone without expression, which made him still more forbidding.

"Where do you come from?"

"From Chang-tang, from Tashi-lunpo, from the *labrang* of the Tashi Lama, from Tashi-gompa, from Tso-mavang"; and I came out with a whole string of names which I gabbled like a lesson learned by heart.

"I know it. You have been with the Tashi Lama, you have sailed your boat on Tso-mavang, and you have been turned out by an order from Lhasa, and have to leave Tibet by the great highroad to Ladak. I know everything."

"Then questions are unnecessary."

"I wish also to know why you have returned to Tibet, which is closed to Europeans, and I want to know what you are doing here, in Totling."

"You wish to know this and to know that, and I intend to travel all about Tibet. No one has been able to stop me yet from wandering where I would. You may try it, but you will suffer for it."

"Have you a passport from Lhasa?"

"No."

"Then you have no right to show yourself in Totling."

"No, none. And for that very reason it is incumbent on me to leave the country by the shortest way to India."

"We will see about that. First of all I will take down some notes. What is your name?"

"Sven Hedin."

"That I know."

"Then why do you ask me?"

"To check my information. It is my duty to know what kind of people pass through Totling, especially when

" they are travelling without passports. What is the name of your country?"

"Svidingvé."

"Right! How many men and baggage animals have you?"

"Six men and ten baggage animals."

"That agrees. I shall send this very day a report about you to Lhasa. Why have you just drawn the temple gate and the *labrang*?"

"To take the drawings with me as a remembrance of Totling, and to show my countrymen what things are like here."

"No one is privileged to draw anything here. I have no mind to lose my head on your account. You have sketched Dongbo, Daba, and Mangnang also. The monks who permitted such things will be punished."

"You will perhaps leave Tugden Nima alone?"

"Show me your drawings."

"With pleasure!" I answered, handing him the case in which I had only two loose sheets, that a shower of rain might not spoil all. He took out a sheet and asked:

"What does this represent?"

"The temple portal out there."

"This is not a temple portal."

"No, certainly not, when it is held upside down."

"I shall keep your drawings."

"Then you are a thief."

"It is you who act as a thief when you go about drawing without permission. However, you may have the temp e portal, but I shall keep the *labrang*."

"Listen to me, Changtsö; you had better be civil. Beware of the Tashi Lama; he is my friend, and I may complain of you to him. You are a Gelugpa, so take care!"

"It is true that I am a Gelugpa, but in secular affairs I obey no one but the Dalai Lama and the Devashung. I have nothing to do with the Tashi Lama."

"I have come here to inspect the temple halls of Totling. Be so good as to order all the doors to be opened."

"Ha, ha, ha! A European in the temple halls of Totling! No, never!"

He leant back on his divan and laughed and snarled and laughed in his cold room like an old tom-cat. But he had thawed a little, and the thunder-cloud on his brow had passed off.

"Can you sell us provisions, Changtsö? I pay well."

"So I have heard from Daba. I will inquire; you shall have an answer to-morrow. Your caravan is no doubt well armed?"

"We have a gun and two revolvers."

"Can I see your weapons?"

Kutus was sent off at once to fetch our arsenal. The Changtsö became still more friendly; he balanced the small revolver in his hand, and said in a questioning tone:

"I should like to buy this."

"It is not for sale."

"Oh, surely; tell me how much you want for it; I can pay you."

"But I do not want money. Let me see the temple and you shall have the revolver as a present."

"No, that will not do," and he gave me back the revolver.

"Very well, if you can do without the revolver, I can dispense with the temple. If the inside is not better kept up than the outside the loss is not great."

Now I had had enough of the Changtsö. I rose and departed after a polite leave-taking on both sides. A heavy shower of rain pattered down on us as we walked down to the tents. The sprouting barley-fields got a good drenching; yellow rivulets streamed down from the terraces and emptied their muddy water into the Sutlej. The road we had just traversed became impassable in a moment, and it was lucky that we were just descending the slope.

When the day was declining I sat in my tent, looked

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over the great river, and listened to the patter of the rain on the gravel of the bank. Suddenly the neigh of a horse was heard. A stranger appeared at the tent door. Aha! Mohanlal, the Hindu doctor, whose acquaintance I had made the year before in Gartok. Abdul Kerim had, then, duly delivered my letter to Thakur Jai Chand, and he had kindly sent Mohanlal with all the necessaries I had asked for, and two books as well. It was August 13. Since October 1907 I had heard no echo of the outer world. The good Mohanlal was certainly not well posted up in the events of the great world beyond the mountains and seas, but it was a great pleasure to hear all he knew. He gave me a very acceptable account of the remaining thirty days' marches to Simla, with distances in English miles. Twenty days earlier we had left Tokchen with the feeling that we should soon be home. And now we had a whole month more.

We smoked cigarettes, drank tea, ate supper, and talked till midnight. Mohanlal was really entertaining. Among other items he told me a tragi-comical incident which had taken place in Gartok.

One of Thakur Jai Chand's friends on the south side of the Himalayas had sent by a mounted messenger a request for a loan of a thousand rupees. The money was counted out and sewed up in a double bag, which the messenger tied with his knapsack and clothes behind his saddle. He set out on August 2, escorted by two servants of Thakur Jai Chand, who were to show him the ford through the much-swollen Gartong. The river was divided into three arms, two of which were easily forded. Therefore the messenger, apparently a thoughtless youth, sent the men back and proceeded to cross the third arm, wading through the water alone. The left bank was high, and when the horse made ready to jump up out of the water, which was 3 feet deep, the saddle got loose and slipped down into the stream with everything on it. The poor man began at once to fish, and fished the whole day and all the next,

and for four days grubbed about in the mud in spite of the rapid current. On the fifth day he found the saddle, the garments, and the knapsack, but not the money-bag. When Mohanlal rode past the spot the incautious and unfortunate wight was quite in despair, and was still waiting on the bank until the river should fall after the rainy season and give up its booty.

The once noted Tsaparang, which stands on the left bank of the Sutlej, just below Totling, is now even more decayed than the monastery village. A *dzong* is said to administer justice in Tsaparang, but only during two winter months, and for the rest of the year it is removed to another village. Only sixteen men live in the place, and grow barley. The background consists of the high yellow löss terraces with their fantastically modelled forms. Below the village the Sutlej sings a ballad of a king who three hundred years ago brandished his sceptre over the valley and defended his kingdom with horsemen and lances.

CHAPTER XXV

THE FIRST JESUIT IN TIBET

AN unpretentious little book lies open in front of me during the hours I devote to my own recollections of Totling and Tsaparang, and I can hardly keep my eyes away from it. The book has only thirty-one pages, and yet I had to pay eighty gulden for it in a Dutch old-book shop. The pompous title, *Novo Descobrimento do Gram Cathayo, ou Reinos de Tibet, pello Padre Antonio de Andrade da Companhia de Iesu, Portuguez, no anno de 1624. Com todas as licenças necessarias. Em Lisboa, por Mattheus Pinheiro, Anno de 1626,* is out of proportion to its contents and size.

Do not suppose that I bought it to read. Its contents are translated into other tongues, which are more easily understood by readers of Germanic race. But I wished to have the original report in my fairly complete collection of Tibetan literature; I wished to turn over the leaves and to gaze on these faded reddish leaves; I would inhale the atmosphere around these remarkable lines, and piously stroke my fingers over the fine dust which adheres to the paper after a lapse of nearly three hundred years.

There is something peculiar about old books. For my part I regard them with the deepest reverence. They are like voices speaking from past centuries. Searching eyes, which have scanned the printed lines, have long been closed for ever, but the books still live. This *Novo Descobrimento* still utters the same words and speaks in the same language as in the days when King Gustavus

Adolphus reigned over Sweden. I regard this book with the feeling expressed in the classical words of Tegnér: "What do I care for living duffers when I have the heroes of humanity in my bookcase?" I love it because Antonio de Andrade is the author, and because it was printed when the famous Jesuit still lived and sojourned in Tibet; yes, it passed through the press in Lisbon in the year when he laid the foundation stone of a Christian church in Tsaparang, where we have hastily examined the miserable huts down by the Sutlej river. What does it profit that Odorico de Pordenone was the first European to visit Tibet? His recollections are far too scanty and indistinct. Padre Antonio is the first who brought to the world reliable information from that country. He is the first European who crossed the Himalayas and penetrated into Tibet from the south, and also the first who followed the Ganges of Vishnu to its source. He stands like a milestone on the highroad of the centuries, a boundary cliff in the stream of time, and he marks the point from which the history of Tibetan exploration really begins. I myself am for the present, perhaps, the last in the sequence. At any rate I have heard of no successor in the regions which I have revealed. Only in Tsaparang, that old town so closely associated with Antonio's name, do our routes touch, though there was an interval of three centuries between us. It is no wonder that I regard the faded book with peculiar tenderness and devoutly repeat its last words, "Laus Deo!"

Antonio de Andrade was born in the year 1580 at Oleiros in Portugal. At sixteen he entered the Order of Jesuits, and was sent in 1600 to Goa on the west coast of India. There for some years he took an active part in the work of the Order, and there one day a vague report reached his ears that there were Christians among the peoples of Tibet. C. Wessels says of these reports that they had their origin "in a superficial resemblance of some of the ceremonies of the Buddhist church to those of the

Catholic." Andrade declared himself that he undertook his journey only for the glory of God, and that the Portuguese had long wished for an opportunity of *discovering* Tibet.

Antonio had sojourned a quarter of a century in Goa when he found an opportunity, in 1624, of travelling to the snowy mountains in the north. Accompanied by Father Manuel Marques and two Christian servants, he left Agra on March 30, and at Delhi joined a caravan of Hindu pilgrims, who intended to make a pilgrimage to the holy places on the upper Ganges. The route probably ran past Hardwar, " the Gate of Vishnu," through countries subject to the Raja of Srinagar, and never before seen by a white man. The party marched over slippery rocks and under the dense leafy vaults of forests. In the depths below roared the Ganges. The bold Portuguese shrank from no danger, and when he was suspected of espionage in Srinagar and imprisoned, he succeeded by his calmness and prudence in regaining his liberty.

His journey took him to still higher regions along the banks of the Vishnu-Ganga, along the same route which Webb and Raper followed 180 years later, quite ignorant that the Portuguese had been there before them. In his excellent account of his journey Raper does not say a word about Andrade, but he confirms the accurate observations Andrade had made. C. Wessels has compared the two travellers in a meritorious study lately published in *De Studien, Tijdschrift voor godsdienst wetenschap en letteren*, vol. 77 (1912), No. 4, under the title, " Antonio de Andrade, S.J. Een ontdekkingsreziger in de Himalaya en in Tibet (1624–1630)." His essay is the best we have on the old Jesuits. Wessels has eradicated many errors which have made the round of descriptions of Tibet. The absurd notion that Andrade travelled through Kashmir and on his way discovered Manasarowar, the Tso-mavang of the Tibetans, was not the least of such mistakes. Andrade's Srinagar is not the capital of Kashmir, but the town of the same name on the Alaknanda. As to the lake which he

discovered, and has been mistaken for Manasarowar, we shall return to that presently.

The missionaries continued their journey and reached Badrinath, where one of the holiest shrines of the Hindus in this part of the Himalayas attracted crowds of pilgrims. At a later time Webb and Raper advanced as far as the village Mana on the Saraswati, the upper course of the Vishnu-Ganga. But Andrade went on farther, undismayed, up to the eternal snows and to quite unknown Tibet. On this road he approached the highest crest of the Himalayas. The sufferings and privations of the little party became here intense. Marques had remained behind, and Andrade had with him only the two Christians and a guide from Mana. He is very reticent in his little book. The geography of the country no longer attracts his attention; he is exclusively occupied with his struggle for victory, and tells of the scanty food, the parched barley-meal steeped in water, which the travellers subsisted on, and how they were inconvenienced by the poisonous gases which rose from the ground.

On the third day they were overtaken by three men from Mana who depicted in startling colours all the dangers, including death, they would have to encounter if they continued on the way to the pass. Andrade and his two servants were not deterred by fears, but the guide returned with the messengers. The way up to the pass became worse and worse. They floundered up to the knee in snow, and sometimes they sank to the chest or the armpits; they often hitched themselves along over the crust with the movements of a swimmer, so that they might not be suffocated in the loose snow. At night a mantle was laid over the snow and the three men lay upon it, covering themselves with the other two mantles. Sometimes snow fell in such quantities that they had to get up and shake it off the mantles lest they should be buried alive. The snow blinded their eyes, their hands and feet were numbed with cold, and yet Andrade went on. And at last we read

in his little book, *Novo Descobrimento*, the following pregnant words which for three hundred years have been misunderstood and falsely interpreted: "Nesta forma fomos caminhando até o alto de todas as serras, onde nasce o Rio Ganga de hum grande tanque, & do mesmo nasce tamben outra, que rega as terras do Tibet." That is, he continued his march "as far as the highest point of the rocks where the Ganges rises in a large pool, in which pool also another river has its source, which irrigates the lands of Tibet."

Note that he speaks of a "tanque," not of a "lago." He means, as C. Wessels has clearly shown, the glacier pool Deb-tal, 400 yards long, which lies at the top of the Mana pass, and from which springs the Saraswati, the stream that flows to the Ganges. The other river which runs northwards and irrigates the lands of Tibet is, of course, a brook, which rises on the pass or in its immediate neighbourhood and enters the Sutlej near Totling. The discoverer Andrade was, then, quite right, and it is not his fault that Markham and others have misunderstood him, and ascribed to him the discovery of Manasarowar. Holdich seeks to detract from his fame, saying that he is only a doubtful authority. It is singular how easily the geographers of our time can make negative discoveries in countries where they have never set a foot. Without contributing a single positive item to our real knowledge, they content themselves with pulling down what others have built up. Wessels has done a good deed in breaking a lance for the honour of Andrade, and he now, after three centuries, secures full justice for the heroic exploits of the Portuguese, when the voice of the Jesuit has long been silent, while his little book still preserves the truth between its cracked boards.

But Andrade was misunderstood centuries ago. In his noted work *China Illustrata* (Amsterdam, 1670) the learned Jesuit father, Athanasius Kircher, collected some remarkable tales about Andrade's journey. Andrade was,

Kircher remarks, fortunate in making several striking discoveries in Tibet, among others the sources of the Ganges and the Indus. This was communicated to Kircher by a baptized Hindu, named Joseph, who had accompanied Father Andrade on all his travels and at the age of eighty-six was staying in Rome. Father Henrik Roth, also, told Kircher in Rome all he knew about the Portuguese missionary.

Let us hear what Kircher has to say:

> On the highest mountains of Tibet, covered with eternal snow, there is a large lake in which rise the greatest rivers of India; for from this sheet of water issue the Indus, the Ganges, the Ravi, and the Atenh. The Ganges flows to a chasm where its cascade makes a terrific roar, and then after irrigating a lovely valley it rolls on to the sea into which it pours. As to the Indus and the other rivers, they stream slowly along the mountains as we see on the map.

At another place in his book Kircher says of Father Antonio that from Tsaparang he crossed "a high mountain on the top of which is a large lake, which, from what he says about it and from what he could see, is the source of the Indus, the Ganges, and the other large rivers of India."

It would take us too far if we were to enter here upon a discussion of this interesting problem. Suffice it to say that I cannot share Wessels' opinion, but believe that Kircher really meant Manasarowar, of which Joseph and Roth had gleaned reports. Kircher afterwards mixed together in his own storeroom the communications of these two and Andrade's own narrative, which, indeed, contains not a single word indicating that he had the slightest knowledge of that lake. It is inconceivable that he could have lived for years on the banks of the Sutlej and yet not know whence the river came. It is enough that he says nothing about it.

But Kircher goes much further. He makes Father Andrade continue his journey from the enigmatical lake through Rudok and the lands of the Tanguts and Tatars

to China. He makes him travel in two months all through Asia! The title of the little book lying on the table before me is doubtless to blame for Father Kircher's mistake, *Novo Descobrimento do Gram Cathayo* . . . for "Gram Cathayo" is the "Great China." Curiously enough the learned orientalist, J. Klaproth, has calmly accepted this statement, for he writes quite confidently:

"In the year 1624 the Portuguese Jesuit Antonio de Andrade undertook a journey from Tibet to China. He set out from the realm of the Great Mogul, took the road through Garhwal, crossed Tibet and came safely to China.

But I am forgetting! We have left the good Father and his two Christians on the Mana pass. From the top he looked forth, as he expresses himself, over the kingdom of Tibet. All was white there, covered with deep snow. Their snow-blinded eyes could detect no road. The two servants were tired to death and were obliged to turn back. Andrade took pity on them and accompanied them lest they should perish in the snow. After three days they fortunately met scouts of Bothia, who had been sent out from Mana, and after three more days' march they pitched their camp in a cave, where Marques, who brought provisions, joined the party again. Then they rested a month while the summer sun melted the snow. Then the missionaries marched up again with better success, crossed the pass, and were soon after received by envoys from the king of Tsaparang. In the early days of August 1624 they reached the "Cidade Real," the royal city, below Totling, where now only sixteen inhabitants dwell in dilapidated huts.

The king and the queen overwhelmed Father Antonio with tokens of hospitality, and he enjoyed greater freedom than any of the travellers who, during nearly three centuries, have followed in his footsteps and have set out for adventures in Tibet. He remained, nevertheless, only a month in Tsaparang, about which town he has nothing to say but

that it lies on a river. At the beginning of November we find him again in Agra, and there he wrote the little book which I have told about, and which is dated November 8, 1624.

In the following year he set out on his second journey to Tsaparang, and during the next twenty-five years about eighteen missionaries followed his example. In 1642 Marques stayed at Tsaparang, and Cacella died in 1630 in Shigatse; six years later Alano dos Anjos died in Tibet. C. Wessels has promised us an essay on his fortunes, of which only a faint echo has come down to our times.

How long Andrade stayed on his second visit to Tsaparang is not known. He reached the town on August 28, 1625. On April 11, 1626, he laid the foundation stone of the first Christian church in Tibet. The narrative of his second journey is dated August 15 in Tsaparang. He was still there in September 1627, as appears from his letters. But in the year 1630 he was staying in Goa, and the year after he despatched four missionaries to Tsaparang. At the beginning of the year 1634 he made ready for a third journey, with six companions, to the snowy country in the north, but on March 19 he was removed by death and was buried at Goa. It is believed that he died of poison.

Two hundred years passed by before a European came again to Tsaparang. Kircher and D'Anville had inserted the town on their maps and in later times English travellers had heard it spoken of. In the year 1855 Tsaparang was visited by Adolph Schlagintweit who found at this famous place fifteen houses.

Now I take from my bookshelf another small volume as old and discoloured as the first. It contains the description of Andrade's experiences on his journeys and is, as mentioned, dated August 15, 1626. It was printed in Paris in 1629, and its title is *Histoire de ce qui est passé au Royaume du Tibet.* At that time Lhasa had not attained

its present renown, Hundes stood for Tibet, and Tsaparang was the largest town in the country.

My affection for this book is not less than that I cherish for Andrade's first book. Perhaps even greater, for I can read it easily. Here Andrade mentions that he, very different from myself, received a passport from the Great Mogul to the "little kings in the mountains," and his journey was easier than the former. In Tsaparang a house was placed at his disposal close to the palace in which the king's son resided.

The little book is full of amusing descriptions of the lama monks of Tibet, their manners and customs, their religious views, and their useless exchange of opinions and disputes with the steadfast Father.

When they prepare for worship (he relates) they blow trumpets of metal; but trumpets are also made of leg and arm bones of dead men, and they also make use of rosaries with beads made from dead men's skulls; and when I asked the reason of this, the lama, who is the king's brother, answered that they used such trumpets in order that the people might remember the dead when they heard the blare, and that they often drank out of skulls that they might retain a lively remembrance of death.

One day when attending a festival, Andrade expressed to the brother of the king his astonishment that the lamas danced and said that "our priests were so earnest and dignified that they would not for all the world be seen in such an indecent act and one so unworthy of the profession to which they were consecrated." "Do not be surprised," returned the lama, "for in this performance the young lamas represent angels"; and he added that just as we (Europeans) depict our angels singing and playing on musical instruments, so they (Lamaists) represented angels —that they danced was only a minor detail—and he said that he had seen a small picture of the birth of Christ in which several angels were depicted, who in their joy at the birth of the Redeemer sang and played on musical instruments.

Father Antonio had a sharp eye for all that related to religion, and forgot to tell future generations about the mysterious country which lifted its lofty snowy peaks around him, and about the great river which he saw rolling its waters down the valley with a thundering roar. Only the following lines contain some slight reference to a temple festival in Totling-gompa :

Not long ago I went off to a town which lies about half a day's journey from Tsaparang. I accompanied the King who wished to visit his mother, the Queen, who had undertaken a pilgrimage to this place, where there are several temples and five hundred lamas. As crowds of people flocked on this day from all sides to the place, their number amounted to two thousand. When we arrived, we found those on whom the King would wait drawn up in perfect order, two and two like our priests in a procession ; and they extended over a considerable length of road, singing after their fashion, and the more important persons carrying various banners in their hands. When the King caught sight of them, he at once dismounted from his horse, and standing on a long silken carpet, laid down for him by the lamas, made three genuflexions to the whole assembly, lowering his head and hands to the ground. Then the whole company made six similar obeisances to the King. This shows what great respect this prince shows to the lamas when they appear before him as a body corporate, whereas when he meets them singly he does not salute them at all, except, of course, their superior, who now happens to be the King's brother.

He speaks of the great friendship of the good King to the Jesuits, and of his reverence for the only true church, which he regarded with much greater affection than the religion of his own country. On one excursion the King showed much greater honour to Father Andrade than to his guest, the king of Ladak, "ruler of a neighbouring kingdom." When they came near the town and the people streamed out to see the spectacle, the King again dismounted and took his seat on a carpet, placing his son on his left side and Father Andrade on his right. When the

missionary modestly declined to sit down while the Queen and all the others were standing, the King said: "You are a priest and our father, are you not?" All this, besides the supposed desire of the King for baptism and Christianity, makes us suspect a pious fraud on the part of the missionary who wanted money from home to enable him to continue his work. And the two superior lamas may be excused for reproaching the King because he had been induced in six months to turn his back on the faith of his fathers and adopt another. But Andrade characterized their conduct as "tricks of the devil," prayed and fasted in order to gain the soul of the King, and arranged a disputation with the Buddhist priests in the illustrious presence of His Majesty. On this occasion he decoyed them into slippery places. They had no answers to give, tried to shirk the question, and scoffed at the Jesuits.

Another time (relates Andrade) I asked a lama in the presence of the King what means of salvation a sinner could use to be restored to the grace of God, and he replied that it was sufficient to utter the words *Om ma'ny patmeonry* (*Om mani padme hum*), which is equivalent to saying: however much I have sinned, I shall still get to heaven. If that is true, I retorted, take a dagger and stab a man to the heart, rob the King of the pearls he wears, insult us with the most extravagant abuse, and then say simply *Om ma'ny patmeonry*, and you are at once absolved and purified from all sins. Do you think that is reasonable?

The Father assured the lama that in spite of all his fine talk he would, without good works, be condemned to the fires of hell. Then the King turned to those present and mocked the lama so severely that Andrade had to beg him not to let it be known that he, the Jesuit, had imparted to him the knowledge he possessed. Then Andrade asked the Tibetan monks what the formula, which they had always on their lips in season and out of season, precisely meant; and none of them could answer. Then said Andrade, "As you patter these words like parrots which

do not understand what they say, know that *Om ma'ny patmeonry* signifies Lord, forgive me my sins." And from that hour all the monks assigned this meaning to the mysterious words.

The good Jesuit continues:

They show the greatest reverence to our sacred images, and our church is quite full of such. Thither the people of rank resort, worship and throw themselves on the ground, for they are accustomed to adore holy images in this fashion. They are always asking us to hold the holy book (so they call the missal) over their heads, for thereby we shall receive strength to unfold to them the mysteries of the Gospel. When the King was in our church not long ago with a large retinue, I had to explain to him what the Christ crucified, the figure in front of us, meant, and it was a strange sight to see him turn to those present and say: "Here you see that it is true that the Son of God is a living book, very different from that which the lamas read, which is not God and cannot be God." . . . Some natives from the town of Utsang (Lhasa), where there are many churches, have told me that they have seen in them many sacred images similar to our own. Who can doubt that it is the will of Heaven that they shall soon be drawn to the worship of the true God?

Once the lama, the brother of the King, came to Andrade's church and gave him seven copper bowls, saying that water should be offered in them daily to the God of the Christians. "So they do themselves, and they believe that it is also the custom with us." The chalice especially excited his interest, and he begged to be allowed to witness the ceremonies at Andrade's service.

After the lama had seen everything, he told me that the Grand Lama in Utsang (the Dalai Lama) offers small quantities of bread and wine, that he eats and drinks of them himself and distributes the remainder to the other lamas, and that he blows and breathes with his mouth over the wine he presents to God, which he alone and no one else may do. And he added that this Grand Lama wears on his head a tiara like mine but much larger.

Father Antonio de Andrade entertains greater hopes of being able to convert the Tibetans than Father Gerbillon, who says of the Mongolian Lamaists:

> I believe that they would become ardent Christians, if they accepted the true religion; but, as it is, they are, to tell the truth, so obstinately rooted by the lamas in their false doctrines that there is little hope of converting them to the faith.

With regard to Father Andrade's vain search for traces of an old Christianity in south-western Tibet, Ritter, in *Asien* (vol. ii. p. 447), expresses the opinion that the reports which the Catholic missionaries heard in India, as has so often been the case, mixed up the ceremonies of the Lama cultus with those of the Catholic church.

In taking leave of Andrade and his naïve but interesting communications, we are naturally confronted with the question to which Ritter alludes in the words above.

CHAPTER XXVI

LAMAISM AND CATHOLICISM

How little I thought during the memorable days I spent in Tashi-lunpo that the observations I made at the New Year's festival and noted down would two years later call forth protests and disapproval from many sides in Central Europe! I ventured in the first volume of this book to dwell on the many points of similarity between the external forms of Lamaism and Catholicism. I did not allow myself to be influenced by any preconceived opinions, but relied simply and solely on my own judgment. My own impression was strong and clear, but I only touched on it lightly in describing my days in the cloister court of the Tashi Lama. I called the *labrang* the Vatican, and the Tashi Lama, Pope, and said that, like the Pope in Rome, he was a prisoner in the Tibetan Vatican. I remarked on the monastic and cloister life, on the processions and the funeral rites, and saw in the gifts of hard cash, which the pilgrims have to present to the clergy, a counterpart to the Peter's pence of Rome.

It would have been vulgar and reprehensible if I had intended thereby to irritate the Catholics from sheer wantonness. It would have been stupid and unseemly, for I have so many sincere friends among the Catholics and so many ineffaceable memories of their domestic hearths. Had I not been the guest of Catholic missionaries under the palms of Baghdad, the city of the *Thousand-and-One Nights*, and in the imperial city of Calcutta? Had I not sat at the table of their brethren in Lian-chu-fu and Pekin, and had

I not returned home with an extraordinary admiration for all I had seen among the amiable learned Jesuits in Hongkong and Sikawei? I was received as a welcome guest by them all, and all gave me valuable information about the districts to which they were voluntarily banished, and in which they worked. Why should I have any intention of wounding them in their most sacred feelings, and offending the immense hosts that stood behind them?

The gigantic work that Catholic missions have accomplished for centuries in purely geographical investigations throughout Asia is worthy of the greatest admiration. They have opened roads into the heart of the largest continent of the world. As far back as the Middle Ages the Franciscân monks Piano Carpini and Wilhelm Rubruquis brought to the West the first news of the boundless empire of Mangu Can. No words of praise are extravagant for the Jesuits who executed a topographical survey of the whole Chinese Empire in the time of the immortal Kang Hi. The oldest explorers after the monk Odorico were Jesuits, namely, Andrade, Grueber, Dorville, and Desideri. Capuchins dwelt for several decades in Lhasa, and were instrumental in opening a connection between the Land of Snow and the world of white men. Huc and Gabet were Lazarists; one cannot think of Tibet without calling to mind Huc, the incomparable Abbé Huc, overflowing with kindness of heart, cheerfulness, and wit.

My quite innocent utterances have aroused among several Catholic organs of the press a displeasure which is unmistakably betrayed in strong language. It was said that I was guilty of gross shamelessness, and had committed an indecency "in comparing Catholicism with the darkest heathenism and idolatry." Two ultramontane newspapers declared in indignant terms that my comparison of the two religions was an exhibition of stupidity, ignorance, and bad manners. But their passion was quite misplaced and unnecessary, for I never made the slightest attempt to gainsay their characteristics. Some Catholic priests in southern

Germany and Poland honoured me with letters in which they complained that I had sadly shocked their religious feelings. Should a new edition of *Trans-Himalaya* be published the unfortunate passages must be struck out, for they gave a thoroughly false impression of Catholicism.

And yet it had never been my intention to support in the slightest degree the movement called " away from Rome." A small storm raged over my quiet study and made a vain attempt to disturb me in my tranquil work. I seemed to see grim cloister brothers and reverend prelates pointing the finger at me and denouncing me as an arch-heretic. Catholic bells sounded in my ears, I perceived an aroma of incense, heard the mass being sung, and saw monks and nuns walking in procession to the church festivals. And all this grand attractive church pomp I had compared to Lamaism! I had committed a misdemeanour, and it almost seemed as if I were making a pilgrimage to do penance, to confess and promise amendment, when I travelled to Rome, sauntered under the dome of St. Peter's, and waited upon the good old venerable Pius X.

Then I had neither time nor inclination nor means of answering these attacks. Since then two years have elapsed, and during this time I have studied old and new sources for a history of journeys of discovery in Tibet. Without looking for them I have come across several accounts of Lamaism, and I am armed to the teeth now that I take the field, not to cause annoyance to Catholics, but to prove that I was quite right when I spoke of the similarity of the outward forms of Lamaism and Catholicism.

The subject is not a new one. It is as old as the Bohemian forest. The monks of the Middle Ages noticed the striking similarity, and were astonished at it. Many Catholic missionaries have remarked on it in plain words without being attacked on that account by their brethren in the faith. Often the statements are unreliable and amplified with a wealth of detail that raises suspicion.

Some authors have drawn on the experiences of others without referring to their sources. Often also mistakes have been made by great authorities. Thus, for example, Professor Kuchner, in his brilliant work on Tibet, *Opisanie Tibeta* (Vladivostok, 1907), asserts that Rubruquis, who travelled in 1253, " gives in many places information about Lamaism, and points out many curious points of resemblance between the rites of this religion and the Catholic divine service." In W. W. Rockhill's excellent translation of *The Journey of William of Rubruck to the Eastern Parts of the World, 1253–55* (London, 1900), not a single word on this subject is to be found on pp. 199 and 232, and the word Lamaism does not occur. Rubruquis speaks on one occasion of a " priest from China," and on another of a reincarnation, and Rockhill supposes that he meant thereby priests from Tibet. On the other hand, the Franciscan frequently mentions Nestorian Christians whom he met on the way, and who had had numerous congregations in the countries north and east of Tibet for 600 years before his time.

Recently an interesting inquiry by Richard Garbe with the title, " Has the Development of Buddhism been influenced by Christianity? " has appeared in *Deutsche Rundschau* (No. 14, April 15, 1912, p. 89 *et seq.*), edited by Julius Rodenberg. Before we proceed further it may be instructive to give a hasty glance at its contents.

In the middle of the third century B.C. Buddhism spread over north-western India, and there was developed and flourished till the eighth century the school which differentiated the northern Buddhism from the southern, and is known by the name of Mahayana or the " Great Ship." In this modification of the original dogmas some investigators see the effect of Christian influence. One of them, the Jesuit father Joseph Dahlmann, against whom Garbe's criticism is chiefly directed, has lately gone so far as to ascribe the victorious progress of Buddhism over half Asia and a third part of the human race, not to its own strength,

but to the Christian thoughts and ideas which it had adopted in north-western India. Dahlmann therefore maintains that this disguised form of Christianity explains the immense extension of the new religion.

In the Catholic press Dahlmann's supposed discovery was hailed with delight, nay, often with enthusiasm. At last a sagacious investigator "had made an end of the humbug of Buddhism."

Relying on the best authorities to be had, on Grünwedel, M. A. Stein, etc., Garbe examines the demonstration of Dahlmann in the smallest details, and blows it bit by bit into the air. It would carry us too far were we to enter deeply into this matter. Suffice it to say that chronological impossibilities confront the Father. Garbe proves with irreproachable perspicuity that the Mahayana Buddhism has made its triumphant progress through the east Asiatic world owing to its own vigour. On the other hand, he is disposed to answer in the affirmative the question whether Christianity has left in later times traces in northern Buddhism.

Padma Sambhava in the middle of the eighth century instituted Tibetan Lamaism, which thrust out the indigenous Shamanism. The founder of Lamaism was, however, shrewd enough to incorporate various dogmas and customs of the Shamans in his form of Buddhism, which was already mixed with Sivaist elements.

Christian influence first becomes possible in the year 635, when the Nestorians began to send missionaries into those regions. And it was after this time that the belief in an almighty, omniscient, primordial Buddha arose in Tibet and Nepal—a monotheistic deviation from the original atheistic Buddhism. Garbe thinks it not unlikely that this almighty god may have been borrowed from the Nestorians. With much greater confidence he insists on the influence of Christianity on the later development of the Lamaist cult, "which has been even styled a caricature of the Catholic cult."

Among other striking similarities Garbe cites the fact from Waddell that high lamas cross themselves before the commencement of a religious rite. They also hold a ceremony which has a remarkable resemblance to the Eucharist. Bread and wine are distributed to the worshippers. The bread consists perhaps of small butter puffs, and the wine is perhaps a kind of beer called "chang." But whoever partakes of it is long-lived. Garbe says:

> Strictly Catholic, too, seems to us a fundamental idea of Lamaism that the priests have in their possession the keys of heaven and hell, for they have invented the universally received maxim: "Without a lama before one, one cannot approach God."

Garbe asks in conclusion whether the similarities between the Catholic and Lamaist cults may be explained by the assumption that the minds of men, when they move along the same lines of feeling and thought, also tend towards the same outward forms. "But," he answers, "the concordances are so numerous and close that we cannot escape from the assumption that borrowing has taken place." It is of course certain that Catholicism has stamped its image on Lamaism, and not *vice versa*. And just as evident is it that the two religions have in essential matters developed quite independently of each other.

After this introduction I will proceed to cite some older expressions of opinion. In a German collection of various narratives of travel with the title *Allgemeine Historie der Reisen zu Wasser und zu Lande; oder Sammlung aller Reisebeschreibungen*, etc. (Leipzig, 1750), there is in vol. vii. p. 212 a whole section with the promising superscription, "The Religion of Tibet and its astonishing Agreement with the Romish." Herein it is said somewhat scoffingly that the missionaries who visited Tibet—that is, Grueber, Desideri, Della Penna, and others—"did little more than notice the similarity between the religion of Tibet and their own." Some missionaries explain this agreement by the

supposition that Christianity was perhaps preached in Tibet in the time of the Apostles. If other missionaries are to be believed, this agreement is very close, " and involves almost all the doctrines and ceremonies of the Romish church." Gerbillon mentions the following ceremonies :

(1) Holy water ; (2) singing in divine service ; (3) prayers for the dead ; (4) the clothing of the priests, which is such as the Apostles are represented as wearing, and the caps and capes such as bishops wear ; (5) their Grand Lama is much the same to them as the Pope is to those of the Romish confession. They made the offering of the Mass with bread and wine, gave extreme unction, blessed those who wished to marry, prayed over the sick, honoured the relics of demigods, had monks and nuns, sang in the choir like monks, observed certain annual festivals, submitted to severe penances, including flagellation, consecrated bishops and sent out missionaries, who lived in extreme poverty, and travelled bare-footed through the desert to China.

According to this collection of travels the Prefect of the Capuchin mission, Orazio della Penna, is the author of the following lines :

The religion of Tibet is in the main a copy of the Roman. They believe in a God and a trinity, but full of errors, paradise, hell, and purgatory, also full of errors. They have prayers, alms, vows, and offerings for the dead, have a large number of monasteries with monks numbering thirty thousand, who take the three vows of poverty, chastity, and obedience, and others besides. They have their confessors, who are selected by their superiors, and receive a licence from the Lama—as from a bishop—without which they cannot hear confessions. The church organisation is ordered as in the Romish church.

Régis and certain other Catholic missionaries report that they did all that was possible to prevent this similarity being known, for it would be injurious to Catholicism if it were compared with a religion which practised the grossest idolatry, and such a revelation would bring water to the Protestant mill.

When the Pope and the congregations in the 'forties of

the eighteenth century refused to grant more money to the Capuchin mission in Lhasa, an appeal was made to public charity by a circular printed in Rome in the year 1742. The document represented Tibet as for the most part converted; only a few more missionaries were required to bring the work to an end. A criticism of the time dealt severely with this appeal. It was asked what doctrines were preached that the people of Tibet had so readily accepted Christianity. The Holy Scriptures or the confession of Pius VII., or the rules of the order of the Capuchins? Jesus Christ was never mentioned. On the other hand, the outward resemblance of the order of the church was insisted on. But this very similarity must be an obstacle, the critic remarks, for if the real difference was only that the lamas of Tibet had to learn the Latin Mass in order to be Christian lamas, they would dispense with conversion. It was also cited as an advantage that the Tibetans might have only one wife. Why was nothing said of the custom of a woman having husbands by the half-dozen? The women would fight against the new teaching, and defend their rights with teeth and nails.

It was the Prefect Della Penna who worked on behalf of the Capuchin mission in Tibet. He related that he had had many a hard battle with the Lamaist monks, and had once written a long letter to the king in Lhasa in defence of Catholicism. In his reply the king extolled the advantages of his own religion and called Christianity a lower form of belief, though there was good in both.

Honour to the Capuchins in any case! They behaved themselves like men in Tibet. We have no reason to be angry with them because they or their speaking trumpet, Father Georgi, in his noted but ill-written book *Alphabetum Tibetanum* (Rome, 1762), lays the blame for the similarity of the two religions on the old Manichaeism. The heresiarch Manes is said to be responsible for all the devil's work in Tibet, but we do not hear in what wonderful way his doctrines reached that country. In one place

(p. 543) Georgi expresses the following apprehension: "Antiquum hoc et portentosum connubium Manichaiae hydrae cum Paganismi monstro in Tibeto commixtae, terret me plurimum, ac nescio quid mali in posterum futurum portendere videtur Ecclesiae." (Compare also *Relazione inedita di un viaggio al Tibet del Padre Cassiano Beligatti da Macerata* [Florence, 1902, pp. 7 and 11].) It is not right, as Dr. Gutzlaff does in the *Journal of the Royal Geographical Society*, 1851, p. 226, to look for similarities between the rituals of the Capuchins and of Shamanism, and to assert that on that account the missionaries were regarded as lamas from western lands. For what has Shamanism to do with Catholicism?

We can go back further than the time of the Capuchins. It is very significant that the first European to enter Tibet, as far as we know, the Franciscan monk Odorico de Pordenone, calls the Grand Lama in Lhasa, Pope. He means the abbot of the principal temple, for the office of Dalai Lama did not exist then. His own words run: "In this city dwells the Obassy, that is to say their pope in their language. He is the chief of all the idolaters. . . ." In a Latin translation (by Hakluyt) it is given: "Papa eorum qui est caput & princeps omnium Idolatrorum . . . sicut noster Papa Romanus est caput omnium Christianorum." (Henri Cordier, *Les Voyages en Asie au XIV^e^ siècle du bienheureux Frère Odoric de Pordenone* [Paris, 1891, p. 450]; compare also Henry Yule, *Cathay and the Way Thither*, p. 149.)

Our friend Andrade says of the monks of Tsaparang that they live together "just as our cloister people." They do not marry, and the young ones sing chants clear, loud, and expressive "after our style." Their temples are like our churches but finer and cleaner, are painted and adorned with golden statues. He had seen an image supposed to represent the Mother of God, and had found there confession, holy water, and a sprinkling which might be compared to baptism.

Athanasius Kircher in *La Chine Illustrée*, etc. (Amsterdam, 1670, p. 97), says of the Dalai Lama that he sits on a cushion in a room lighted by many lamps. Thither come the pilgrims, who cast themselves down before him, touching the ground with the forehead as a sign of homage. They are not allowed to kiss his feet as is customary with the "pontifical sovereign in Rome." Here are plainly evident the wiles of the Devil. To make a mock of holy things and rob God of the honour due unto Him the Evil One has by a trick of his usual cunning caused these barbarians to imitate us, and induced them to pay to a human being the reverence due to God and Jesus Christ alone. He profanes the most holy mysteries of the Catholic Church by forcing these poor wretched creatures to celebrate these mysteries at the place where they keep their hideous idols. Because he has observed that Christians call the Pope Father of Fathers, he makes these idolatrous barbarians call that false god Grand Lama or high priest.

This Kircher was himself a Jesuit. He explains the resemblance between the two religions as a device of the Devil. Grueber fell back on the same expedient in 1661. "Nothing," writes Richthofen in the first volume of his *China* (p. 672), "struck him more than the resemblance of the worship to that of Catholics, which he regarded as a device of the Devil."

Apparently they are the views of Father Régis which we find in the following words of the author Du Halde in his *Description de l'Empire de la Chine*, etc. (vol. iv. p. 469). He says that able missionaries have come to the conviction that traces are to be found in the old books of Tibet of "our holy religion" which was preached there in the times of the Apostles, but in the course of centuries has through lack of knowledge been mixed with errors which have finally gained the upper hand.

The indications on which they base their assumption is the dress of the lamas, which is very similar to that in which the

Apostles are represented in old pictures; the subordination which is found among them and has some resemblance to the Roman hierarchy; several of their ceremonies which are not far removed from our own; their idea of an incarnation, and lastly the doctrines which their most eminent doctors promulgate. All this, indeed, makes it necessary to subject their books which are found in Lhasa and the monuments existing there to a thorough examination.

This Du Halde was likewise a Jesuit.

Now let us hear what missionaries of later times have to say. The immortal Huc, Prêtre missionnaire de la congrégation de Saint-Lazare, records in his *Souvenirs d'un voyage dans la Tartarie, le Thibet et la Chine* (Paris, 1853, vol. ii. p. 110 *et seq.*):

If we examine, even most superficially, the reforms and innovations introduced into the Lamaist cult by Tsong Kapa, we are quite unavoidably struck by their resemblance to Catholicism. The crozier, the mitre, the chasuble, the cardinal's robe, or the choir robe which the higher lamas wear on journeys or in performing certain ceremonies, the double choir at divine service, the chants, the exorcism, the censer with five chains which can be opened and closed at pleasure, the blessing which the lamas impart by extending the right hand over the heads of the faithful, the rosary, the celibacy of the clergy, their separation from the world, the worship of saints, the fasts, processions, litanies, holy water; these are the points of contact the Buddhists have with us. Can we say that these points of contact have a Christian origin? We believe so, and though we have no positive proof of such a derivation in tradition or in the antiquities of the country, it is nevertheless permissible to express conjectures which in every respect are highly probable.

We know that in the fourteenth century, during the supremacy of the Mongol emperors, Europeans were often in communication with the peoples of Central Asia. We have already in the first part of our narrative of travel spoken of the famous embassies which the Tartar conquerors sent to Rome, France, and England. Undoubtedly these barbarians must have been so struck by the pomp and grandeur of the ceremonies of Catholic worship that they took back with them to

their deserts an ineffaceable remembrance of them. We know also that about the same time priests of various orders undertook long journeys to introduce Christianity into Tartary; they must at the same time have penetrated into Thibet and reached the Si-fan people and the Mongols on Koko-nor. Jean de Montcorvin, Archbishop of Peking, had established a choir in which numbers of Mongolian monks practised daily the recitation of Psalms and Catholic rites. When we remember that Tsong Kapa lived at the time when Christianity gained an entrance into Central Asia, we shall not be astonished that there are such striking resemblances to Christianity in reformed Buddhism.

And can we not say something still more positive? May not those legends of Tsong Kapa which we collected ourselves at his birthplace, hearing them direct from the lamas, serve to support our view? After eliminating all the extraordinary details which the imagination of the lamas has added to the narrative, we can affirm that Tsong Kapa was a man pre-eminent by his genius and perhaps by his virtues; that he was instructed by a stranger who came from the West; that the pupil after the death of the master moved westwards, and that he remained in Thibet where he promulgated the doctrines he had been taught. Was not the stranger with the large nose a European, one of the Catholic missionaries who at that time penetrated in large numbers into Central Asia? It is no wonder that Lamaist traditions have preserved the memory of that European face, of a type so different from the Asiatic. During our stay in Kum-bum we heard lamas remark more than once on the strangeness of our appearance, and they said without hesitation that we must be from the country of Tsong Kapa's teacher. We may assume that an early death prevented the Catholic missionary from completing the religious education of his pupil, and that the latter, when he wished afterwards to become an apostle, thought only of introducing a new liturgy, whether because he possessed only a defective knowledge of Christian dogmas or because he had fallen from the faith. The slight resistance his reforms encountered appears to indicate that the progress of Christian ideas in those countries had severely shaken the foundations of the Buddhist cult. There remains only to be investigated the question whether the numerous points of contact between Buddhists and Catholics are helpful or unfavourable to the spread of the faith in Tartary and Thibet.

These similarities apply of course only to forms of worship. Referring to doctrine Huc says in *Le Christianisme en Chine* (Paris, 1857, vol. iv. p. 11) : "

Father Desideri, in our opinion, has very extravagant notions on the points of contact he thinks he has discovered in dogma between Christianity and the Lamaist teaching. It is true that in Thibet are found astonishing reminders of the great primitive traditions and unmistakable traces of the Catholic missionaries of the Middle Ages ; but it is not true that the Buddhists have any clear and definite idea of the Holy Trinity, the salvation of men, the incarnation of the Son of God, and the holy eucharist. The germs of all these dogmas may possibly underlie their creed, but they are certainly not firmly established.

In another passage of the same work Huc exclaims :

La coïncidence des lieux, celle des époques, les témoignages de l'histoire et de la tradition, tout démontra donc jusqu'à l'évidence que la hiérarchie et le culte lamaïques ont fait des empruntes considérables au christianisme.

The amiable Abbé C. H. Desgodins, who lived in the extreme east of Tibet for a generation, endeavoured to explain away the resemblance between the two religions. In his work, *Le Thibet d'après la correspondance des missionnaires*, is a special rubric on the subject, " Hiérarchie lamaïque comparée à celle de l'église catholique," in which he says :

Certain writers have gone even so far as to compare the Lamaist hierarchy to the Catholic church, its Pope, its cardinals, its primates, its archbishops, and its bishops. The comparison is more than clumsy, for in Catholicism the hierarchy is among the secular clergy, from the Pope down to the lowest pastor ; the fundamental hierarchy of the church and its religious societies are nothing but useful though not indispensable auxiliaries. In Tibet, on the other hand, the whole hierarchy is entirely monastic, and there is not the slightest trace of a secular clergy.

In fact the organization of religious bodies in Tibet is fundamentally far more similar to Protestantism than to

Catholicism (I). On both sides we find a striking parallelism in the independent rival sects, very little cohesion among the clergy of each sect, and the association and interference of the civil power in the sphere of religion and in religious affairs. The only similarity common to Lamaism and Catholicism we find in the form of monasticism, which in the Catholic church is a secondary matter, but in Tibetan Buddhism is fundamental. If we go back to the 13th century we find that history throws a light on the previous development of this form, and we hope that it will finish its work and yield us infallible proofs that the form of monasticism as well as many other ceremonies in the outward rites of worship are simply borrowed from Christianity.

An anonymous writer in the *Calcutta Review* (1877, vol. lxiv. p. 115) says of George Bogle's description of the ceremonies in Tashi-lunpo in the year 1774, that some of them "irresistibly lead us to comparisons between the Buddhism of Tibet and the Roman Catholic religion. The mind reverts to the scene at St. Peter's on Easter-day, as we read of the Teshu Lama seated under a canopy in the court of the palace and a vast crowd around awaiting his blessing." After enumerating a host of points of contact, in the spirit of Huc, he instances the analogy between the Buddhistic system of incarnations and the dogma of the apostolic succession. He gives the preference to the Buddhist invention. The idea of letting the spirit of a deceased lama pass without human intervention into the body of a child, he considers much more elevated and purer, as well as more in harmony with the feelings, than to let this transference be decided by the votes of a college of cardinals.

About the same time as the ambassador Bogle, John Stewart expresses in the *Annual Register* (1778, "Characters," p. 36) his astonishment that the Dalai Lama "often distributes little balls of consecrated flour, like the *pain bénit* of the Roman Catholics." And he reckons up a number of resemblances, and thinks that it is no wonder that the Capuchins thought they could detect among the lamas of Tibet every trait of their own worship.

In the notes to the French edition of Carl Peter Thunberg's narrative of travel (*Voyages de C. P. Thunberg au Japon* [Paris, 1796], iii. p. 248) L. Langlès makes some profound reflexions on Buddhism and Christianity. In Buddhism he finds counterparts of the saints and the canonized Popes of the Catholic Church. He quotes also the passage in the *Histoire du Japon* of the Jesuit Charlevoix where it is said: "The remarkable circumstance is that in the midst of this formless chaos of religion we find traces of Christianity, that we have scarcely a mystery, a dogma, or even a precept of charity, that apparently are not known already to the Japanese." The illustrations in the work of Father Georgi show, as Langlès remarks, a striking similarity between the dress of the lamas and the clothing of Catholic priests. All this, according to him, is quite comprehensible if we take "Tibet or the plateau of Tartary" to have been the cradle of all knowledge.

Perhaps I have already wearied my readers with all these quotations. Well, there are only a couple more. The subject is very absorbing, and it has drawn under its yoke even men like Napoleon and Voltaire, for a few minutes at least. The latter does not, indeed, mention our analogies, but he makes a droll remark about the Dalai Lama, wherein he has certainly not hit the mark any more than in his reflexions on Charles XII. Thus he says in his *Essai sur les mœurs et l'esprit* (Paris, 1775, ii. p. 143): "It is certain that the part of Tibet where the Grand Lama rules belonged to the empire of Jinghis Khan, and that the high priest was in nowise molested by the monarch, who had in his army many worshippers of this god in human form." Abel Rémusat replies to this (*Mélanges Asiatiques* [Paris, 1825], vol. i. p. 129 *et seq.*) that Jinghis Khan never had an opportunity of manifesting such respect for the high priest, "for in the time of Jinghis Khan there was no Dalai Lama in Tibet."

Napoleon's grand personality passes only by pure

chance before our eyes. Captain Basil Hall landed at Jamestown in August 11, 1817, and two days later had an audience with Napoleon. Hall quotes from the conversation that he "appeared well aware of the striking resemblance between the appearance of the Catholic priests and the Chinese Bonzes; a resemblance which, as he remarked, extends to many parts of the religious ceremonies of both. Here, however, as he also observed, the comparison stops, since the Bonzes of China exert no influence whatsoever over the minds of the people, and never interfere in their temporal or external concerns." (Compare Frémeaux, *Les derniers jours de l'Empéreur.*)

The great Sanskrit scholar H. H. Wilson says, with regard to the men of the Capuchin mission in the *Journal* of the Royal Asiatic Society of Great Britain and Ireland (1843, vol. xi. p. 293): "They all agree in the resemblance between the religion of the Lamas and Christianity." This remark occurs in a note to the account of Mir Izzet Ullah of a journey from Ladak to Yarkand, in which the Mohammedan dares to make the following impertinent statement: "There is likewise an obvious affinity between the Lamas of Tibet and the monks of Christian countries." Mir Izzet Ullah made this journey by order of the Manasarowar explorer, Moorcroft, who, at his visit to Daba in 1812, observed that on the death of a rich Tibetan a considerable part of his fortune escheated to the church, and an idol had to be presented to those priests who prayed for the repose of the soul of the deceased, just as in the Roman Catholic Church. (Compare *Asiatick Researches*, 1818, xii. p. 437.)

The bishop Dr. Nicholas Wiseman (afterwards cardinal) delivered in Rome in the year 1835 twelve lectures, which were published with the title *Twelve Lectures on the Connection between Science and revealed Religion.* In the eleventh lecture Wiseman discusses the religious conditions of Tibet, saying:

When Europe first became acquainted with this worship, it was impossible not to be struck with the analogies it presented to the religious rites of Christians. The hierarchy of the Lamas, their monastic institutions, their churches and ceremonies, resembled ours with such minuteness, that some connection between the two seemed necessarily to have existed.

Relying on the authority of Abel Rémusat and two other scholars, Wiseman comes to the following conclusion :

At the time when the Buddhist patriarchs first established themselves in Thibet, that country was in immediate contact with Christianity. Not only had the Nestorians ecclesiastical settlements in Tartary, but Italian and French religious men visited the court of the Khans, charged with important missions from the Pope and St. Lewis of France. They carried with them church ornaments and altars, to make, if possible, a favourable impression on the minds of the natives. For this end they celebrated their worship in the presence of the Tartar princes, by whom they were permitted to erect chapels within the precincts of the royal palaces. An Italian Archbishop, sent by Pope Clement V., established his see in the capital, and erected a church, to which the faithful were summoned by the sound of three bells, and where they beheld many sacred pictures painted on the walls.

Nothing was easier than to induce many of the various sects which crowded the Mongol court to admire and adopt the rites of this religion. Some members of the imperial house secretly embraced Christianity, many mingled its practices with the profession of their own creeds, and Europe was alternately delighted and disappointed by reports of imperial conversions and by discoveries of their falsehood. . . . Surrounded by the celebration of such ceremonies, hearing from the ambassadors and missionaries of the west accounts of the worship and hierarchy of their countries, it is no wonder that the religion of the Lamas, just beginning to assume splendour and pomp, should have adopted institutions and practices already familiar to them, and already admired by those whom they wished to gain. The coincidence of time and place, the previous non-existence of that sacred monarchy, amply demonstrate that the religion of Thibet is but an attempted imitation of ours.

Wiseman, then, defends the view that the Lamaist cult

was imported into Tibet from Europe. Most, however, of what he has to say on the subject is borrowed from the works of Abel Rémusat. The latter says in his "Discours sur l'origine de la hiérarchie lamaïque" (*Mélanges Asiatiques*, Paris, 1825, vol. i. p. 129):

> The first missionaries who came into contact with Lamaism were not a little astonished to find in the heart of Asia numerous monasteries, as well as solemn processions, pilgrimages, religious festivals, the court of a high priest and colleges of lama superiors, who elect their chief, the prince of the church and spiritual father of the Tibetans and Tatars. But as faith in their creed was in no small degree a virtue, they did not think of concealing these points of contact but, in order to explain them, regarded Lamaism as a degenerate kind of Christianity, and in the details which seemed to them so surprising they saw traces of a former intrusion of the Syrian sects into this country.

Abel Rémusat shows that just at this time when ambassadors and Catholic monks travelled from Europe to the East, the new residences of the Buddhist patriarchs were established in Tibet. "Is it to be wondered at if they, in the desire to increase the number of their adherents and to lend their religion greater lustre, adopted certain liturgical practices and something of the foreign pomp which imposed on the masses?"

Abel Rémusat seeks, then, to prove that the purely outward resemblances that exist have arisen owing to Lamaism having in later times adopted part of the splendid ritual of the Catholic Church. Accordingly he is opposed to the view that Lamaism is a degenerated Christianity. Among those who have maintained this opinion he mentions Thévenot, the Abbé Renaudot, Andrade, Della Penna, Georgi, Deguiques, Lacroze, "and many others." However the resemblance between the two churches may be explained, it is evident from Abel Rémusat's exposition that such a resemblance has really been observed by a large number of Catholics.

Henry T. Prinsep, in his little book *Tibet, Tartary,*

and Mongolia (London, 1851, pp. 5, 12, 136, 141, 165, etc.), says of Lamaist Asia:

> The extraordinary similitude in many parts of the doctrine, and of the books, and ritual, and forms, and institutions of this religion with those of Romish Christianity, which was remarked by the Jesuits who visited Tibet in the seventeenth century, and even by Father Rubruquis in the thirteenth, might lead to the belief that they had been borrowed entirely from this latter. . . . The discipline, the habits, and even the ritual of these monasteries of Tibet and Tartary, have also a remarkable resemblance to those of the churches of Rome and Constantinople in the middle ages.

Prinsep refers also to Turner's astonishment at the Tibetan antiphonal singing between the priests and people, and its similarity to the grand ceremonies of the Romish Church. Csoma de Körös has translated some of the Tibetan church canticles, and Prinsep says of them that he is himself astonished at their resemblance in spirit and tone to parts of the litany and the psalms which are sung or recited in the same manner in the Catholic Church.

In the *Géographie Universelle* of Malte-Brun, published in Paris in 1860, I find (vol. iii. p. 255) the following sentence:

> Rome and Lhasa, the Pope and the Dalai Lama, present to us very interesting points of contact. The Tibetan Government, which is entirely Lamaist, seems to be to a certain extent a copy of the ecclesiastical administration of the States of the Church.

In conclusion one more quotation from Koeppen's noted book *Die lamaische Hierarchie und Kirche* (Berlin, 1859), p. 116 *et seq.*:

> Older and later travellers who have penetrated into the Land of Snow, or into one of the countries converted by it, have often expressed their astonishment at the numerous relations between the forms of the Catholic and Lamaist cults, the similarity, nay, identity of the ceremonies, priest's dress, sacred utensils, etc. In the times of gross superstition this circumstance was ascribed to the author of all evil, Satan.

The Devil—it was said—the "Apè of God," had imitated even the Christianity of the Lord God, and founded a church which outwardly mimicked the Catholic, but was essentially and truly nothing but a heathen creation of the Devil. The Capuchin missionaries of last century put in the place of the Devil the heresiarch Manes, whom they identified with Buddha, and made the founder of Lamaism. The latest emissaries of the Propaganda who visited Lhasa arrived at the conviction that all the analogies of Lamaism and Catholicism, even the pontificate, the celibacy of the clergy, the adoration of saints, confession, fasts, processions, etc., as well as the use of exorcism, holy water, and lastly, bells, rosaries, mitres, and croziers, etc., were all borrowed from Christianity, and were first introduced into the Lamaist ritual in the train of the innovations of the doctor bTsong kha pa. . . . It is hardly possible to discuss more closely the question exactly what Lamaism has borrowed from Christianity, and what on the other side Catholicism has borrowed from Lamaism or Buddhism; we will only remark that it is a mistake to ascribe to bTsong kha pa such far-reaching reforms that he first created the whole Lamaist cult as it now is, and that it is, on the other hand, quite uncritical and unhistorical to consider primitive Buddhist institutions and usages, such as celibacy, confession and fasting, which are all demonstrably older than Christianity, as innovations and, moreover, imitations of Catholicism.

The rosary, too, is older in India and even Tibet than in Europe. Koeppen (on p. 319) says:

The home of the rosary appears to be India, whence Muslim, and through them probably Christians, have received it, for we cannot well credit the human brain with having twice invented this peculiar implement.

On baptism he says (on p. 320):

Baptism, that is, the custom of sprinkling children with water immediately or soon after birth, or dipping them in it, and at the same time giving them a name, is not exclusively a Christian sacrament, but is to be found in many so-called heathen religions, even among quite rude Shamanist peoples, and expressly as an act of religious consecration and expiation, as a spiritual purification. That the Lamaist Church observed the rite is a matter of course with its hierarchical tendency.

As regards marriage Koeppen points out a difference between the two churches (as on p. 321):

According to the decisions of Catholic councils a man is cursed who maintains that the status conjugalis is as pure and holy as the status virginitatis. It is, therefore, a glaring inconsistency that the celebration of marriage, that is, the act whereby two persons pass from a more holy to a less holy state, should be held to be a sacrament in the Catholic Church.

Koeppen also has his opponents. Thus W. L. Heeley in *The Calcutta Review* (1874, lix. p. 139) says of him that he is evidently a freethinker, has a bad opinion of the priests and their ways, and "hates the lamas because they remind him of the Catholic Church as much as some of the Catholic missionaries hate them because they parody the church."

In the first volume of Adrien Launay's *Histoire de la Mission du Thibet* (p. 23) I find the following:

In the seventeenth century Indian caravans reported that there were Christians in Thibet; they had no doubt been misled, like some historians, by the similarities between the Catholic and Lamaist ceremonies.

One of the men of the time most renowned for his knowledge of Buddhism, Dr. T. W. Rhys Davids, concludes his excellent little handbook, which has run through many editions, *Buddhism: being a Sketch of the Life and Teachings of Gautama, the Buddha* (London, 1903, p. 250), with the following words:

Lamaism, indeed, with its shaven priests, its bells and rosaries, its images and holy water and gorgeous dresses; its service with double choirs, and processions and creeds and mystic rites and incense, in which the laity are spectators only; its worship of the double Virgin, and of saints and angels; its images, its idols and its pictures; its huge monasteries and its gorgeous cathedrals, its powerful hierarchy, its cardinals, its Pope, bears outwardly at least a strong resemblance to Romanism, in spite of the essential difference of its teachings and its mode of thought.

In the first volume of my book I have only slightly touched on some similarities between the two churches. Now I have shown by all sorts of quotations that not only Protestant students of religion, but also a large number of Catholic missionaries, who have lived for years in Tibet, have gone much further in their comparisons than I. Let the reader decide for himself whether I am the one who has committed a sin against religion, or whether the Catholics who have poured forth the vials of their wrath over my head should not be reproached for having permitted themselves serious deviations from the paths of truth.

We have been lured aside into long bypaths from the majestic valley of the Sutlej by Father Antonio de Andrade's successful missionary journeys to the old kingdom of Tsaparang. It is now time to take up again the thread of the narrative. We leave the dying village to its dreams of vanished greatness beside the roar of the royal river, and prepare to depart from a country where once the first Christian bells in Tibet rang in clear tones over the desolate heights.

CHAPTER XXVII

IN THE LABYRINTH OF TRIBUTARIES

THE height in the camp at the foot of the monastery terrace of Totling was only 12,140 feet. We were decidedly going down. A pleasant feeling, after years of sojourn at immense elevations, to descend again into denser layers of air! Two years in the highly rarefied air 16,000 to 19,000 feet above sea-level is about as much as a European can endure. His heart and lungs are not adapted to the scarcity of oxygen which is found up on the borders of interstellar space. When the Dalai Lama travels to Calcutta, he is perhaps troubled by the heat, but he must feel the increase of the oxygen in the air agreeable. It is otherwise with the European. When he leaves half the atmosphere below him, the muscles and the beating of his heart are excessively strained; he is afflicted day and night with the languid feeling of a convalescent after a serious illness, which is not driven off by ten hours' rest in the night.

I noticed the following symptoms in my own case: the temperature of the body fell a couple of degrees below the normal, the respiration and the pulse were quicker than usual, and the slightest movement produced shortness of breath; I became at last indifferent to everything, except the road to India; the two meals of the day I regarded as a punishment for my sins; hot tea and ice-cold water I always liked, and tobacco was an indispensable companion during the terribly long hours of solitude. A limitless impregnable ocean extended ever around me, and its

petrified billows, which towered above me month after month, seemed as though they would never come to an end. I had made my voyage long enough in calm waters, and now I came to the strand of the sea of mountains, where the surf stormed and tossed, and with every day it became more apparent that the conquest of the Himalayas was no child's play.

Now we were going down towards happy India. After the grey unfruitful country of high Tibet, the barley-fields on the affluents of the Sutlej seemed delightfully green, and presently we heard tepid summer winds rustle through the thick foliage of poplars. Even the pattering rain was warm and pleasant; I could throw off the felt rug at night, for the temperature did not fall below 48°. We seemed to be going to meet the spring. I began to enjoy life again; my hours of rest had more effect, and my appetite came back. Therefore it was so inexpressibly delightful to have descended from high elevations.

Even the Changtsö, who was at first so high and mighty, ended in becoming quite agreeable. He procured the provisions we wanted, and bartered a saddle for a revolver. We had no other need for his gracious assistance, for Thakur Jai Chand had sent with Mohanlal a young Tibetan named Ngurup Dorche, who was to act as guide. He knew the roads to Poo, and I might take him with me to Simla if I wished.

Ngurup Dorche headed the party when we left Totling on August 15. We were not long to enjoy a comparatively low altitude. From Mangnang we had descended rapidly to the monastery which stands on the bottom of the Sutlej trough, and now we had to mount again into higher regions, where the road traverses the land of Chumurti in a wide curve to the north of the river.

Our little party marches along the terrace of the left bank before the cloister town, where temple buildings and *chhorten* pyramids rise among the ruins, and here and there a lama gives us a parting look from a dark lancet window.

The path follows up the stream north-eastwards, then turns northwards and makes straight for the bridge over the Sutlej. Between sheer cliffs of sandstone, running 18° N. 85° E., the great river contracts to a breadth of about 80 feet; its depth must be considerable. The huge volumes of dirty grey water roar and toss along the narrow chasm, and present, as one looks up-stream, a grand, fascinating spectacle of irresistible strength. Immediately below the bridge the river expands again and becomes quieter; the mountains recede, leaving space for level strips along the bank, where the erosion terraces are, however, sharply marked or are broken through by small tributaries. But the expansion of the valley is short, for at Tsaparang the river again bores its way through a narrow corridor.

The bridge of Totling is a solid structure, and horses may be trusted on its planks without the slightest anxiety. The bridge-heads are perhaps 40 feet above the water, and are built in the form of stone tunnels on shelves of rock. Between the upper surfaces of the tunnel walls two powerful iron chains are stretched from bank to bank, and from them hangs the wooden pavement of the bridge. The whole is so firmly jointed together that the bridge does not perceptibly tremble under the weight of a horse. The chains serve also as a handrail, and my white horse had no opportunity of trying his luck in another leap.

On the right bank our direction is again westerly, and the road runs over watercourses between hillocks of löss and gravel. The largest of all is the valley through which the road comes down from Gartok and the Ayi-la to Totling. Now about 175 cubic feet of muddy water streamed down its bed, hindering, as usual, the progress of foot-passengers. Our path follows the river bank just opposite Totling, and we have an excellent view of the decayed monastic town. It finally vanishes out of sight as we turn up a side valley, where a brook flows among fresh meadows. Steep walls of clay, sand, and pebbles rise beside it—the cañon country has not yet come to an end. Such is the scenery

until we come to a place where Ngurup Dorche proposes to encamp. The height is 12,290 feet. From the north-east descends a valley named Natang, in which barley is cultivated.

Hardly had the tents been set up, when the south-west monsoon laid a blue-black wing over the country, the day grew dark, and the heralds of Indra blew a rumbling blast. The echo answered in the mountains and valleys, lightning flashed like sword-blades crossing in the fight, the clouds were rent and the rain pelted down heavily on the Natang valley. Later in the afternoon a dull growl was heard from up the valley. Was a violent thunder-squall coming or a cloudburst? No, it was the rain-water which had collected from all sides into a torrent, and was rolling its heavy volumes down to the Sutlej. The noise became slowly but steadily louder, and at last was deafening. Every man to his feet! The ground was quickly examined. The tents stood in the middle of the valley. Is it possible that the whole camp may be washed away? If the whole valley bottom is filled with this raging water, we shall be as in a mouse-trap under a stream of water, for the slopes are so steep that we cannot escape by flight.

It is too late to pack up and look about for a safer place. Look yonder at the nearest corner above the camp! A dark greyish-brown wall is rolling down upon the tents. Yes, it actually rolls over the ground, foaming and roaring, and takes with it all the loose dust, sand, and gravel, and all the dry grass stalks. It is impossible to make ourselves heard. Now the air groans and the ground shakes. At the last moment I seize my papers, resolved that, as far as lies in my power, my notes and maps shall not be lost.

Wonderfully fine and grand is such a spectacle, and at the sight one almost forgets that danger threatens. I cannot take my eyes away from the billow of rolling water. Our excitement increases. But the torrent does not advance as rapidly as might be expected. It fills one

yard of the bed after another, and approaches with crushing force the place where I am standing. Now it is here. Will it seize the tents and carry us off with it in its triumphal course? Must I run off quickly to find a safer spot? The water rises and will soon reach me. No, this time it does not touch us. The tents stand on a slight rise which bears no signs of former flooding. We are on an island which the water cannot reach. But it was a near shave, and had this deluge caught us in one of the narrow passages farther down we should have been in a desperate situation.

For fully two hours this flood of 1000 cubic feet of water continued to rush down the valley. Towards evening the volume diminished, and by the next morning was reduced to a small brook. The water was so full of clay that if you put a hand in it and then let it dry in the air it was covered with a glove of the finest mud. Immense quantities of solid matter are thus washed down into the Sutlej, and do not come to rest until the river can build up banks of mud and sand in some expansion of the valley. How much more powerfully and energetically this diluvial action must have been during the pluvial period! It is easy to see that erosion working through a thousand years can have produced no other result than that here presented to the eye—a labyrinth of deeply cut cañons.

The Sutlej is the main artery for all the rain water draining off Hundes. The river is composed of the united volumes of innumerable tributaries which swell up and fall according to the unequal rainfall in their basins. One day the Natang valley may contain a small brook and the next a great river. But in the main trench of the Sutlej the variations are smoothed out. At Bilaspur, where the river leaves the Himalayas and emerges into the plains of the Punjab, we shall certainly find that when the rainy season commences, and days with rain become more and more numerous, the volume of the Sutlej increases steadily to a maximum, and then diminishes as regularly when rain becomes scarcer in autumn.

In the night of August 15 rain fell steadily and heavily, and we made haste next day to leave the Natang valley before the next flood came down upon us. The small side valley which we followed northwards is excavated in yellow löss loam which the water had made as smooth as soap. The animals were unsafe on their feet; they slided forwards or paddled in the worst mud soup. There was generally a porridge on the bottom of the drainage bed of the valley which looked like freshly stirred mortar, and when we had to wade through it the animals were in danger of drowning. The cañon type still prevailed. We marched between vertical or very steep walls of yellow æolian dust; huge free-standing blocks, towers, and pillars reminded us, as so often before, of the streets and lanes of a town lying in an enchanted sleep. Innumerable ravines of all sizes opened at the sides, and their channels spread out like the spokes of a quadrant of a wheel. Some of these unpleasant ditches were a yard deep and a foot broad. Had the loam been dry it would easily have borne the weight of the animals, but it was softened by the rain; it gave way, and one horse or mule after another tumbled on to his nose in the treacherous pitfalls. When the leader of the train had performed his tumble, the animals behind tried another place.

This valley is sterile, dreary, and silent. The gradient is slight. But when we come to higher regions the landscape changes its appearance. A bush or two, a hardy plant, and a little grass have here and there found a refuge at the foot of a steep wall. The loose deposits which once filled all the Sutlej basin gradually increase in thickness, and at the corners and projections rock *in situ*, phyllitic schist, often crops out. At the last bend in the road hills and domed summits appear in the background like holms and peninsulas in the desert of the clay formations. Before reaching this ground which the æolian deposits have left untouched, we make a short halt at a small spring where the grass is not sufficient to satisfy our ten animals.

Another day's march and the façades of the sleeping town become lower. Occasionally an undermined block of clay has fallen and strewed the valley floor with cubical sharp-edged fragments. Now we have reached the cairn which is erected on the boundary between the æolian accumulations and the heights of Kaling-tang, covered with pebbles and thinly clothed with tall grass. Marked by smaller cairns and *mani* stones the path winds up to the top of a commanding elevation, a stone pyramid visible from all sides. Here it will repay us to rest a while and slowly scan the edge of the horizon. We have just been shut up in the narrow valley where we saw nothing but the nearest cliffs of clay and the next bend of the valley. Now we can breathe freely, now we can see our position, and gain a general view of this singular country, where atmospheric agents and the forces which transform the earth's surface have worked more capriciously and left more distinct traces than in any other part of Tibet.

North-westwards the country retains the same character as heretofore; an inextricable confusion of valleys, ravines, and furrows carved into the æolian clay, a maze of ramifications and drainage channels of every kind and dimension down to the most insignificant and minute runnel of water. A snowy crest towers above the yellow earth to the north-east, belonging to the Ladak range. Westwards the horizon is shut in by stunted domes with small shining snow-caps, which lie not far from Shipki.

The pyramid of rock, conspicuous from a long distance, stands on an upheaval between two valley systems. When we leave its stones, lashed by the wind and doomed to destruction by weathering, we follow first one of the smallest runnels, then larger and larger gullies and ravines, cut ever deeper into the loose crust, until the last corridor passes into the large Shangdse valley, which runs south-westwards down to the Sutlej. Juicy barley-fields and marshy meadows line its brook, and amidst them stand about fifty square grey-washed houses decorated with streamers,

which together constitute the village of Shangdse. A solitary more pretentious house with a *chhorten* before it is the dwelling of the headman. Shangdse-gompa is built on a hill on the right side of the valley, and consists of two red houses and a white building surrounded by the usual memorial pyramids. Seven lamas of the Gelugpa sect are said to live and labour in this monastery.

The Shangdse brook carried 280 cubic feet of water, but the following morning, after a fine night, had fallen to 180. The day had been burning hot, and with 70° at one o'clock it was suffocatingly hot, and so much the more as the air was still. The height was 13,760 feet.

As soon as camp 474 was pitched, lamas, villagers, and women came up to the tents, where they sat down quite at their ease and began to talk to us. There was not a sign of the mistrust which we met with in Totling. How could they suspect a caravan which came from Totling and had a Tibetan guide? Now that we had got past Totling we should no doubt find a free passage everywhere.

The next day's march was like the preceding. We travelled north-westwards up a narrow gradually rising valley to another hilly elevation, and saw from its cairn a view now well known to us; then we descended the next valley, Choktse, which is just like the Shangdse valley. The inhabitants of the Choktse valley dwell like ants on the löss walls of the right flank, where they have a small number of exceedingly primitive huts. They were at the time out in their barley-fields attending to the irrigation which is effected by two spring-fed brooks. The fields are in tiers of terraces, and the water runs through open pipes from the higher to the lower in a fixed order. The industry and watchful care of the good men and their wives showed that they entertained good hopes of the year's harvest.

Oxen and cows were grazing on the meadows near the village, the first we had seen for a long time, another hint of warmer regions. We had, indeed, seen in the course of

the day two wild asses, and on the slopes cheerful marmots piped shrilly from their holes. But what of that? We were, nevertheless, about to leave the high, cold, and bare Tibet; we were—heavenly thought—on the way to India, the land of legends and jungles. Barley-fields we had seen for many days past, but now we had reached the first agricultural village, a settled population instead of wandering nomads, cattle took the place of yaks, and sheep-rearing, which was everything up on the heights, was of only secondary importance to the peasants whose villages we now visited.

We have nothing to do in Choktse, so we ride past the village, up more valleys, over more heights, and perceive the monastery Rabgyeling-gompa on its hill in front of us. It is melancholy and affecting to see all these religious houses in so desolate a country. The cloister cells claim far too large a percentage of the male population; the men could employ their time and strength much better than in cleaning lamps and prostrations before golden idols. And yet I say, "Long live monasticism." Only bright memories linger in my mind from its misty light.

Juicy meadows on the left bank of the Rabgyeling river tempt us to encamp. I have just ordered a halt when Ngurup Dorche cries out, "No, we cannot camp here, sir."

"Why not? The grass is good, the water clear, and the weather settled."

"Quite true, but if rain comes in the night we shall be cut off, for this river has a bad reputation, and is very difficult to ford on account of its depth."

"Very well; then we will stay on the right bank."

We waded through the pure fresh water, and then let the animals go back to the meadows on the left bank. If rain came we could fetch them in time.

Picturesque, rich in colouring, and mysterious as a fairy castle, Rabgyeling-gompa lifts its streamer-adorned battlements above the valley. On the highest point of the

summit of the hill a red-painted *lhakang* defies the destructive forces of the atmosphere, the water, and the earth, resembling the capital of a pillar or an eagle's eyrie hanging over the abyss. The insecure substratum of pebbles looked as though it must yield to the weight of the next rain. It seems like braving God to sleep a single night in the building. A second shrine stands at the foot of the hill among the huts and yards of the village and a whole tangle of *chhortens*. The dwellings of the monks form a small village compound, begirt by a wall of its own.

Conducted by two monks I paid a short visit to the lower temple and saw there some artistically executed mural paintings, which, however, had suffered much from damp and the water that trickled from the roof. Otherwise the interior was the same as usual. The two divans were there, as well as the eight pillars with their banners and ribands. Piles of loose sheets replaced the bound treasures of the shelves. In the middle of the back wall sat Buddha, six feet high and clothed in a yellow mantle. Before him on the altar table the *dii minores* were set up in rows, with lamps in brazen bowls burning in front. The whole was blended into a harmonic, subdued, and sufficiently dirty tinge of colour.

A *kore*, or open passage, with balustrade and a free view on all sides, runs all round the outside of the temple and lay-village, passing by some *chhorten* pyramids. In niches at their sides are rows of prayer cylinders. When the pilgrim or monk, in making the circuit of the *kore*, comes to them, he never omits to set with his hand all these machines revolving round their upright iron axles, and their humming and grating accompany his steps. This action has the same effect as if the wanderer gabbled off all the prayers written on long strips of paper in every one of the prayer-mills. But woe to him who turns the mills the wrong way! Both the rotation and the circuit of the *kore* must be performed in the direction of the hands of a watch.

Through a loophole in the inner side of the passage I could look down into a partially underground crypt, into which the monks would not let me enter. I could see, however, that medallions in bas-relief, representing Buddha, painted in colours and partly gilded, adorned the longer wall. Some freshly cut *mani* stones lay on the earthen floor and a finely chiselled stone image; I would have purchased it with silver coin but my offer was refused.

Eleven serving monks lived in Rabgyeling. The outer walls of their houses were painted greyish-blue, red and white, in vertical stripes, a pattern intended to proclaim the connection of the monastery with Sekiya. The monks were as friendly disposed as the laity and their wives, who came to our tents to sell us small pats of more or less rancid butter.

In the light of the evening sun the higher *lhakang* shone red as blood on a sacrificial stone. The shadows grew longer, filling the valley, where the stillness was broken only by the murmur of the river. The stars, friends of all pilgrims and wayfarers, twinkled brighter than usual in the clear evening. The temperature sank in the night to 34.2°. We were at a height of 13,668 feet, and therefore 1528 feet higher than at Totling.

CHAPTER XXVIII

THE DEVIL'S CAULDRON OF THE NGARI-TSANGPO

ASTONISHED that the upper *lhakang* had not fallen down in the night, but still stood red and massive on its mountain spur, I set out next day with my people from Rabgyeling. We climb in zigzags up the heights along a narrow path, which hangs over deep ravines and precipitous cliffs. Before we are aware we are again descending into a deep valley, the upper part of which is called Rildigyok, and the lower Chang-tang. We stay a while on the bank of its brook and refresh ourselves with a drink of clear cold water, which ripples down with a murmur to bring its appointed tribute to its master, the Sutlej.

The huts, fields, and *chhorten* of Rildigyok are not such as to excite any curiosity. We pass on up to more heights and over ridges between deep ravines. As usual, we pass up and down over a succession of valleys before we halt at Karu-sing, which affords spring water and pasture but contains no human dwellings. A *dakpa*, a Tibetan post-runner, passed our tents at a gentle trot, carrying Thakur Jai Chand's English post in a small satchel; he had been, he told us, three days on the way. The satchel, which, between Simla and Gartok, passes through several hands, would soon be forwarded by a fresh Marathon runner.

This night also the minimum temperature is very close to freezing-point, but the height is considerable, 14,108 feet. We have derived no advantage from the regular fall of the Sutlej, for here we are 1968 feet higher than at Totling. This road to India is drearily long. We seem to have

travelled six miles and yet we have only covered three, or even less. And the distance to the frontier and the forests on the south side of the Himalayas seems as long as ever.

On August 20 we had still the same country, a succession of troublesome valleys separated by heights and elevations. Rock *in situ* crops out more frequently, and it is a strongly folded, much weathered, phyllitic schist. In one of these valleys lies Sumur-gompa, quite a small cloister, with two monks and two huts. A side valley opening on the right is called Ldat; its springs and meadows exhort us to set up camp 477 at a height of 12,556 feet. In a terrace wall close by the camp there was a cave with a barred door and closed window openings. A devout monk had passed the whole of the preceding year in its darkness, and was soon to return to his voluntary confinement.

Whistles and the tramp of horses sounded in the valley. A lama in a skull-cap came with two natives from Beshahr, driving before them some horses and a mule.

"Where are you going?" we asked.

"To Bongba in Tibet."

"What is your business there?"

"We own three hundred sheep, which are guarded and tended up there by Tibetans. Now we mean to fetch the wool and carry it to the Indian side."

"Do you go up every summer?"

"Yes, but this year we have something else to see after as well. We have heard that a fellow from Ladak has stolen some of our sheep and has gone off to Nubra with his booty. We are going to pursue the scoundrel."

"Good luck, and farewell!"

The road had been terrible enough before, but I had never found anything so topsy-turvy as on August 21. As usual we began the day with a troublesome climb up steep slopes, reaching at last the pass Dato-la sunk in a sharp rocky ridge. I walk up to the cairn, and am astonished

and dumbfoundered at the sight before me. How in the world are we ever to get down into this abyss? The largest, deepest erosion valley I have hitherto seen yawns between us and a point as high on the other side. Here a huge piece of the earth's crust is wanting. Has it subsided and left a trough in its place? No, running water has ploughed out this trench in the course of enormous periods of time; the Ngari-tsangpo has eaten its way downwards, carrying away one grain of dust after another, one boulder after another, and is still continuing its work, though at a slower rate than in the pluvial period.

I remain a while standing at the cairn. The height is 16,165 feet. Only a short step separates me from the rocky ledge opposite, and the journey thither takes four hours! No words can do justice to the bird's-eye view over this grand, richly and fantastically sculptured valley. It will be difficult to tear myself away and travel on again. It is better to be cautious, and not allow myself to be bewitched by the imposing scene. There rise rocky pinnacles and spurs, and behind them lies the abyss and the opposite flanks. But where is the path? To my eyes it seems as though it vanished under overhanging cliffs. Hallo, here it is, dizzily steep! Do not lose your footing, keep hold of the side of the cliff, take care that your legs do not slide from under you, or you will come a terrible cropper down a blood-dripping channel.

Now it is better. The road makes a turn to the right, is less precipitous, and has a stone parapet on the outer side. But our delight is short-lived. Again we go down headlong until we reach the top of a ramification, which helps us for a time. Once we go up again, and then follow steep slopes between jutting rocks and sheer precipices, with an awful deeply excavated trough on the outer side, which opens into the valley of the Ngari-tsangpo.

We slide, glide, and plant our feet firmly again, and feel the strain at the back of the knee. We take care not to walk in front of the caravan, lest we should be struck

on the head by pebbles and small stones loosened by the horses' feet, which roll down flying and twisting through the air.

The first hour is over, but there are plenty more. Now the path creeps into a very steep trough, so narrow that the outstretched arms can touch both sides. Take care that the animals keep in Indian file! If they enter this hole in couples they will stick fast in it, and cannot be drawn out. There a load has fallen off and is rolling down on its own hook to tickle a lively mule on the hind legs. He kicks out behind, with the result that his own load slips off. It is best to put him right again first, or the trench will be closed up like a corked bottle.

It would be good sport to toboggan down the pebble-covered slopes, if the slide were not so long and did not lead straight into the jaws of death. Look, there to the right, at the stupendous cliffs falling sheer to the valley floor. The Ngari-tsangpo has cut its way straight through the mass. We perceive gaps or niches left in the rough wild ramparts of schist and quartzite by colossal blocks which have at some time fallen out and dashed with terrific noise down into the valley to form the natural bridge over the Ngari-tsangpo.

Ah, here we are nearly at the bottom. Yes, but the last bit is the worst. A series of very steep staircases in the solid rock. If one slips down one step, it will not be the last. It is best to put on the brake in time; it would be a pity if we broke our necks just at this moment when the bottom is so near.

At last we are down and all the bones in the caravan are whole. The sight of the cliffs as we look back is much less awful than the view down into the yawning gulf, for projecting points and knobs of rock hide the declivities and so the slope cannot be seen as a whole.

On the margin by the cairn not a sound of the whirling grinding water was audible. Half-way down a low murmur reached our ears which increased in strength as we de-

scended. And now when we have reached the valley floor, we hear the water tossing madly among rocks and boulders. We see only two stretches of the river as we climb down. All the rest is hidden by cliffs and projections. The erosion downwards has progressed so powerfully and rapidly that the weathering of the valley slopes has not been able to keep pace with it. In places the river has worked so far in advance that whole cliffs are undermined and lean like arches over the water.

Here, too, in the depth of the valley the wild, bold sculpture makes a grand effect, and we shall be glad to pause a while on the small, very original bridge. But where is the bridge and where is the river? The green foaming water seems to dive into the earth and disappear. Wait, here is the bridge. It is just six and a half feet long. Did we not see it with our own eyes, we should by no means credit the statement that the largest of the northern tributaries of the Sutlej, which drains vast areas of the highlands of Chumurti, can find room under a bridge six and a half feet long. Even if the bridge were to fall in, foot passengers at any rate could still cross the river. But the leap would be dangerous and a false step would infallibly lead to death.

Two huge blocks of stone several thousand cubic feet in dimensions have fallen into the narrowest part of the river channel and have taken up a most favourable position. The tops are on the same level and similarly flattened above and form a vault under which the river forces its way. But the vault has a gap, for the blocks do not touch each other. A gap six and a half feet broad separates the two. At first sight one would bet ten to one that they were part of a sill of solid rock, for their lower edges are covered with smaller boulders, pebbles, and sand. But a moment's thought convinces us that so great a river could not have cut its way into so narrow a trench without widening its bed sideways by means of loose blocks, sharp-edged detritus, and other polishing material. Ngurup

Dorche also knew that, according to local tradition, the blocks had actually fallen down and built excellent bridge-heads. The two were originally one block and were broken in two by the fall.

After nature had accomplished the hardest part of the work, all that men needed to do was to lay two short tree trunks over the gap between the blocks. Boughs and joists were laid crosswise on the trunks and the whole was covered with hard stones. The bridge, five feet broad and without a parapet, hangs some 65 feet above the water. It is heard boiling and fuming down below, but the river is not visible, for the trench-like abyss is pitch dark. The fissure widens out just below the bridge, and there the foaming arched billows are seen fighting with boulders and rocky points. The unfortunate man who fell into this whirlpool would be torn into small pieces. A huge spout of water, as powerful as the flywheel of a machine, shoots down at one spot and then wells up in another in flat hissing bubbles, and next moment forces its way into a narrow gorge. And if the lost one survived the first billow, and did not lose consciousness, he would grope in vain for a point of rock to which to cling. These walls are vertical, polished, and smooth, and no power on earth could resist the pressure of the water from above and withstand the wild rush of the waterspouts.

The bridge is called, like the country, Optil. The Ngari-tsangpo rushes on foaming to the north-west, and, as far as can be seen in either direction, the valley is equally deep and wild, though the channel is more contracted just at the bridge than elsewhere. Ngurup Dorche was quite right in saying that the whole wide detour which the road makes on the north side of the Sutlej is rendered necessary solely by the Ngari-tsangpo, which cannot be crossed at a single place below the bridge of Optil. The stretch of the river which we see immediately above the bridge at the foot of vertical undermined cliffs, gives an idea of its general appearance. The water here forms rapids in a small

foaming bed between great masses of rounded boulders, and it strives to eat its way into the base of the cliffs. Possibly the river is as deep as it is broad, and therefore it is difficult to estimate its volume. Such a river cannot be forded; the bed is too narrow and too deep, its fall is too great, and its water possesses irresistible force. Therefore there is no choice but to travel by a roundabout way and over the tiny bridge which spans the huge channel like a match.

We test the bridge. Wind and weather have half-consumed its beams, and it is much too heavily weighted with stones, which only serve to prevent the feet of the animals sinking in between the planks in passing over. Yet nasty holes yawn between the slabs; they have to be covered up with more stones. Two men try their luck on the wretched thing and walk rolling and stamping across the chasm. A mule is led over. The bridge holds. A second crosses with his load on. The shy horses from Chang-tang stop, cock their ears, and start at the heavy awful thunder that rises from the bosom of the earth. A stroke of the whip loosens their legs; the bridge is only six and a half feet long, and in two strides they are safely over.

Huge volumes of water groan, splash, and tumble against the slabs and blocks of stone, and yet we cannot draw a drop of water if we have no mind to fall into the bed above the bridge. We all prefer to wait till the next spring, but we wish we were there. For in the Devil's Cauldron of the Ngari-tsangpo a different climate reigns than on the free open heights above, where the winds of heaven whistle freely round the cairn. The thermometer marks 71.2° in the shade; not a breath of air stirs in the confined valley and the suffocating heat is very oppressive. I have discarded my Tibetan mantle and appear in a dress which is light indeed, but comical rather than becoming.

At the cairn of the pass we had been at a height of 15,279 feet; the height at the bridge of Optil was 12,556

feet, a difference of 2723 feet, three Eiffel towers on the top of one another in an hour and a half! The cairn stood 223 feet above the surface of the Langak-tso, and now we were 2500 feet below the lake. Such figures give a notion of this road. On the Tibetan side of the Himalayas one cannot dance light-footed and gleefully as on roses. But it is grand, bewitching, and enchanting, and inspiriting to travel over the tributaries of the Sutlej, where the rivers strike their chords in accompaniment to the wanderer's steps, and their ringing metallic music calls forth a thousand echoes from the steep rocky cliffs.

How different from the valley of the Tsangpo! There a difference of level amounting to three thousand feet took as many months to descend as here it takes hours. That is the difference between the plateau country, where horizontal lines predominate, and the peripheral Himalayan region, the country of vertical lines. In the enclosed basin of Chang-tang all the products of weathering are carried towards the centre and have contributed for countless ages to level down the country. Here, on the other hand, they are all washed away and the earth's crust is cut down deeply. One is awestruck at this transition from the fla landscape to the sculptured. I know nothing which can compare in overpowering beauty with the scenes which are displayed at every turn before the eyes of the traveller as he witnesses the combat of the Sutlej with the Himalayas. Nature affords no grander parallel to the fight of St. George with the Dragon. The Himalayas lie pierced through at our feet, while the river sings its pæan of victory, tossing to the end of time.

The ascent begins again. We must climb up just as high as we have slid down on the steep slopes of the left side. We strive and struggle, and yet cover no appreciable distance. If we could place all the ascents together and all the descents, the result would be a length of road amounting to several times the distance of an air line over the Himalayas.

On the flank of the left side we notice the marks of a stupendous landslip. A mass equal in volume to all the pyramids of Egypt together has broken loose and fallen to the bottom of the valley. The path runs up between its fragments and the remaining precipitous cliff, past boulders, through detritus, and over hillocks, ravines, and furrows. A small clear and icy cold rivulet takes pity on our thirst, and we all drink deep draughts of it. Then we go on again. The gradient is steep, and we zigzag up at a terribly slow pace. The animals labour, sweat, and pant in quick and hasty gasps; one would think they must burst from want of breath. The valley we follow leads up to a small saddle, and beyond this we cross another valley hollow, where the water collects into a bed which also pays tribute to the Ngari-tsangpo. At the top a view again opens out over the wild valley, and now we can see the Dato-la and its stone pyramid, beside which we stood not long ago. But of the roar of the river not a whisper reaches us.

Grass, herbs, and thorny bushes form here and there ragged clumps. Otherwise the path winds through bare boulders and weathered débris, and schist stands *in situ*. The strike and dip of the rock, about 30° to the north-west, is the same on both sides. The valley is isoclinal, and the river has a tendency to follow the top of the fold; therefore the flanks on the left side are the steeper, and the Ngari-tsangpo is undermining them.

The camp this day was pitched at the spring Koldoktse, at a height of 14,275 feet. No rain was heard in the night, though the sky threatened rain. But after a minimum of 45.3° in the night the storm broke loose at daybreak, and as we packed up our things the rain pelted down on the flanks of the mountains.

The spring Koldoktse was only a stage on the way to the pass Dambak-la. After this saddle is reached we go down rapidly to the valley Sasser, watered by a small brook. Then we climb again up the Tsanglangma-kesa

side valley and come to Sanak among jagged rocks and over flat or steep hills into higher regions, marching in a west-north-westerly direction. At last we are up at the cairn on the flattened pass Pooche-la, where the instruments give a height of 16,165 feet above sea-level, or 3609 feet above the bridge of Optil.

A brook rises just at the top, and we follow it down to an expansion of the valley called Manchu-chen, where a circular stone sheep-fold stands on a flourishing meadow. Sumbu-tar and Bichutse are other valleys on our way; in the latter we encamp at a spring.

During the day we had the wind in our faces, with rain and hail, and I was glad to have the Tibetan mantle. Thunder rolled and the weather was raw and cool. At one o'clock the thermometer marked 43.5°, or nearly two degrees lower than the minimum of the preceding night. This was somewhat different from the summer heat in the gorge of Optil, where we had had nearly 72°. The night of August 22 was starlight and calm, and the air was cooled down to 29.5°. Such cold we had never felt since we had left Tokchen a month before. The morning sun shed its gold brilliantly and clearly over the earth, but its shafts were crossed by the monsoon which began early to drive its blue-grey cloud chariot over the mountains.

We travelled in a subdued light and comfortably warm air to the pass, and thence down into the Chuwang-chung valley, the brook of which unites with the Gyesowang river. The landscape now assumes a different character. Beyond the pass Piang-la the ground falls to the north and north-east, and where the path makes a bend to the south-west the ascent is continuous. To the right of our road rises a very considerable range with snowy peaks, and contours which vividly remind us of the Surla range in the Trans-Himalaya. It seems to run west-north-west.

From a valley in this range runs the voluminous Tokchen-chu river, receiving additions from several transverse valleys. We do not allow ourselves to be tempted

to encamp by the attractive meadows of these valleys, but try to get down to the mouth of the Lungun valley, where four black nomad tents beside the brook present an unusual sight. We encamp near them (camp 480) at a height of 15,594 feet. We were quite in the highlands of Tibet again. Shepherds driving at even their gently bleating lambs and ewes into the folds, grunting yaks, columns of greyish-blue smoke rising from black tents, no fixed settlements, no tilled fields, and no poplars. A heavy snowfall, now and then interrupted by rain, darkness spread by thick clouds over the earth—all seemed to indicate that we had again returned from the depth of the warm valleys into lofty Tibet, to say a last farewell to the friendly amiable nomads.

27° in the night of August 23! This degree of cold also was a parting greeting from the home of eternal winter. It seemed as though summer were passing us by, followed by early autumn. But wait! The next night we were to have it 21° warmer, and two days later the minima would be higher than the maxima here. And in a few weeks we should be almost melted by the heat, and think with regret of the fresh mountain air and the cool summer snow.

But when I awoke in the Lungun valley, felt the icy cold air, and saw the threatening sky, the bare hills of detritus and the snow-clad mountains, I thought that we had not gained much by our month's journey from Tokchen. It was still cold and raw, and we were still at the same enormous height above sea-level. What good had the two crossings of the Sutlej at Kyung-lung and Totling done us, and why had we worn out ourselves and our animals among the innumerable side valleys? Warmth, life, and Simla were just as far off, and we had not yet even commenced the actual crossing of the Himalayas. The Sutlej still streamed north-westwards. At Shipki the river first makes a decided turn to the south-west to begin its stormy course through the Himalayas, overcoming all the obstacles it

encounters. The Indus takes a step farther, and in the neighbourhood of Gilgit bends at right angles to break through the mountains by the shortest way. And farther than all travels the Brahmaputra, which flows through two-thirds of Tibet parallel to the Himalayas before it puts forth its strength on the noted breach of the Dihong valley. The country round Lungun was a boundary stone on our way. Now we had done with the deep trying side valleys, and we had passed successfully through the cañon country. Another country awaited us, other forms of surface, which were not less grand than the former, nay, even more stupendous and astonishing. But now the breach through the mightiest mountain system of the world was before us.

CHAPTER XXIX

DOWN TO THE SUTLEJ

Now came days of excitement.

A quickly passing hail shower rattled down on the mountain flanks as we took down the tents on August 24, and saw for the last time Tibetan herdsmen go to pasture with their sheep, and drive up their yaks to be milked. We ascended to the pass over a gently rising flat of gravel. To the right of the road ripples the brook Neribke, and beyond Kongkong-la rises the lofty range with its snow belts. At length the road comes up to the Dungmar-la pass, which is adorned at the top by an elegant cairn, resembling, with its red-painted poles, streamers, and horns, a bloody sacrificial stone dedicated to heathen gods.

To the south the eyes rove freely over the mighty Himalayan range, which we shall soon cross by the Shipki pass, and on this side of its steep flanks we can perceive the deep wild valley of the Sutlej. At a short distance to the west stands a crest with fields of firn and grey pinnacles. Now and then we hear stones and rocks sliding down the nearest declivities; they are the voices of weathering which announce the law of transitoriness to mountain masses of the hardest granite.

At the stone pyramid of the Dungmar pass we are at a height of 15,919 feet above the sea. Now comes something different. Our road runs south-west, and we go headlong over endless declivities. What a wonderful view! We feel so helpless, small, and lost in this grand, wildly dissected country. Tagha and Shing-chig-ma are

names the guide whispers into my ear. The Chang-tang with its nomad life lies far behind us. We are coming to agricultural villages and men who are alike in all respects to their congeners on the heights except in the words of greeting, borrowed from Mohammedans of India, "Salaam, Sahib." But they are just as good Lamaists as any citizen of Lhasa, as is proved by the well-kept *mani* walls and streamered cairns which line the road.

Gradually we come down from great elevations into lower regions. I lean with my right hand on the left shoulder of Lobsang, and thus walk more surely and quickly over hillocks of nasty granite blocks, through sand and rubbish which gives way under the feet, and over slopes of soil scantily clothed with grass and halms. I feel the air growing denser and warmer. Down in the valley below us I perceive the Tomlang-tsangpo as a motionless, noiseless thread of bluish-green, interwoven with white foaming rapids.

Still we go on. We pass down the last slopes, and find at the bottom an irrigation channel which conducts water from the river to the barley-fields of the village of Tangmet, which lie on a sloping ledge high above the valley bottom. Splashing among round polished blocks of light-coloured granite the Tomlang-tsangpo forces its 350 cubic feet of water in a single shoot between the stone walls abutting on the banks, which support a small awkward bridge. It consists of two slender tree-trunks a foot apart, and is simply covered with a row of stone slabs. This small wicked-looking frame may be safe, but it is prudent to keep in the middle of the stone pavement, for otherwise, as one trunk bends more than the other, one may fall head first into the greenish-white spray. My men carried the baggage over, supporting one another, and the animals were driven through the river farther down, where the water was quiet.

Here is active life, here the spirits of earth toil and do not sleep, as on the heights of Chang-tang. Here the

water dashes through steep valleys eager to reach the sea. See that brook, which has washed itself out a ravine in the high mountains away to the west, and now rushes merrily through a rocky portal into the Tomlang-tsangpo. The village of Pera lies on a cornice above the valley in the middle of its fields, *mani* walls and *chhortens*. The road passes the village. It is rough and dangerous, and takes us up to the small Puge-la saddle, and then goes down again in sharp zigzags very rapidly nearly to the bottom of the valley, where the village of Puge stands, on the top of a terrace like those on which Tangmet and Pera have found sites. The barley-fields stretch to the very edge of the terrace, and the heavy swelling ears ripening for harvest undulate over the valley.

We do not stop, but pass by Puge's stone houses, their projecting windows and balconies raised on piles, which give us a foretaste of the architecture in vogue in the Himalayas. Two willows with dense foliage enhance the charm of the little village. The men from Ladak are here reminded of their home and raise a cheerful song as we troop by. Shy villagers come out to gaze at us; the dogs bark till they are almost hoarse, and come to loggerheads with Takkar and Little Puppy, while the river roars in the valley below. It is really a joyous life, a foretaste of the days awaiting us on the way to Simla.

Beyond the village the path is disagreeable, for now it runs as a small ledge along a slope bestrewn with sharp-edged phyllitic schist and light-coloured gneiss, but soon it goes down to the village Yer, a closely packed cluster of stone huts on the left bank of a side valley which opens on the right. The Buddhist religion is highly honoured by the people of Yer, as may be seen from the silent monuments and speaking stones. Three *chhortens* raise their pyramids in the middle of a field, and from the ashes within blessings pour forth over the thriving corn in its bright dress of juicy green.

A sorry bridge crosses the brook of the side valley.

Takkar, who had crossed the bridge of Pera with the greatest caution, found the bridge of Yer below all criticism, and preferred the 280 cubic feet of water which separated him from the farther bank. When all the caravan had crossed, heroically but howling piteously he plunged into the swirling waves, and was in a moment swept away to a block of stone, on to which he crawled up with an effort, quite dizzy already. There he sat very mournfully, a prey to bad luck; he coughed and cleared his throat after all the cold water he had had to swallow, and then howled at the sight of the billows that boiled and foamed on both sides of the block. We pitched our camp on the right bank and amused ourselves vastly, though perhaps heartlessly, at the pitiful situation into which the big dog had fallen. After Takkar had made himself ridiculous long enough, and had done penance enough for his fear of the bridge, he slipped yelping into the water, fought bravely with the waves, and came again safely but dripping wet on to dry land.

It was long since so charming a landscape had surrounded our tents. They stood on a narrow strip of ground between a vertical cliff and the murmuring brook. Mild breezes rustled through the crowns of the willows and set the bright green barley-fields in motion against the background of grey sheets of rock. The prayer-streamers fluttered lazily on their poles; half-naked, dear, dainty little children played on the flat roofs of the huts, and their bright laughter echoed among the hills. Now and then was heard the bark of the village tykes, and the river ceaselessly sang its plaintive ballad of the endlessly long journey to the sea.

Between Dungmar-la and Yer we had descended 3524 feet in two hours. How delightful it was to breathe this dense warm air! The thermometer marked about one o'clock P.M. 70.7°, against 44.1° on the preceding day, and the minimum at night was only 48°. Well may white men be eager to escape from the suffocating heat of India to the cool air of Simla, or of some other hill station on the

southern flank of the Himalayas. But it is still more glorious to come down from the cold rarefied air of Tibet into the warmth of deep valleys. It is a feeling like that of convalescence after an illness, like rest after hard work, and like pleasant dreaming on flowery meads on mild days beside the sea. Even the nights are delightful; there is no need to load the body with warm skins and rugs, and I lie long awake just to enjoy breathing freely, for respiration is a pleasure and no longer a bodily exertion. Sleep is heavenly and waking is pleasant. And if I do not sleep so many hours as up yonder, I derive greater benefit from the night's rest.

Our elation increases as the heights diminish. The boundless level expanses of Tibet and the extensive views are gone, and we find ourselves in a country where the horizon hangs above our heads in a jagged line. When I get into the saddle in the morning I know that a series of surprises await me. Such was the case also when we left Yer. At the first bend in the valley we ride for a long time along the fields of the village of Tsar and between the willows on a small hill. Another bend and Shinggun-gompa, the village of Pude and its grove of dense foliage are left behind. A tributary intercepting our road is crossed without a bridge. Near the village of Niru we again leave the valley bottom to mount the heights.

We have to cut across a tip of the great range which rises between our valley and that of the Sutlej. There is said to be another path down below, but only foot-passengers can make use of it. Uphill, then, and over steep slopes, over ledges of solid rock in natural staircases, among boulders and detritus. The path is often exceptionally steep and is always troublesome. We rise ever higher above the valley floor, and the murmur of the stream dies away. At length we are up on the Rongtotke-la pass, with its cairn standing at an elevation of 13,690 feet.

Dumb with astonishment at the magnificent view which here meets my eyes, I remain for a time by the cairn to

admire it. In the depths below the Sutlej lies as in a trough, and the famous river flows down from the south-east. Confined between its precipitous cliffs, which form corridors and huge stone columns, it winds along like a greenish white belt, apparently motionless and silent as the grave. The horizontal distances are insignificant, the vertical appalling. One would think a shout could be heard at the village of Shipki to the south-west, so plainly visible are its huts, terraced fields, and orchards. Above the village rears itself the mighty crest which has had to wait for our coming; but now we shall soon be there. The Shipki-la is sunk in its ridge, and just to the right of it we perceive the huge deeply excavated breached valley of the Sutlej. Unfortunately the magnificent view is a little blurred by fine rainy drizzle, and wisps of white cloud which sail like warships about and beneath the crests. But the Shipki-la is not as near as we think. We must first clamber down as low as we can, down to the level of the Sutlej, and then mount to dizzy heights on the other side. The thought that the Shipki-la is the last pass along the whole road to Simla consoles us, however, and after an unusually long rest we leave the Rongtotke-la to the mercy of the winds and begin the endless descent.

Now come numerous zigzags running down steep declivities and banks, deeply cut wedge-shaped ravines, and bending round shoulders of mica-schist, the road runs rapidly down slopes bestrewn with sharp rubbish, destructive to my Tibetan boots. A little brook has worn out a cleft in the rock, and the road again hangs like a cornice over the depths. If the loads are packed too broad the animals may be pushed over the edge. Then come more steep slopes full of boulders and pebbles. We are still far off, but the roar of the river reaches our ears as a slight murmur. Down below we see the bridge of Lopchak. It looks fearful in the distance, weak and fragile as a match.

One steep slope after another is left behind, and we go down lower and lower. The river looks larger, the roar

sounds louder through the denser air and in the contracted valley. We stumble down another length and reduce the height by a hundred yards, and then by another, and thus gradually approach the great river. The view contracts as the mountains rise ever higher. Now the roar of the river fills all the valley. The bridge is the central feature in the scene; over its swinging hammock runs the road to Shipki.

We traverse a few more hundred yards and hurry down the last slopes of detritus. The gradient becomes less, and at last we are down on the flat meadow on the right bank of the Sutlej, in a locality called, like the bridge, Lopchak. The tents are set up near the well-situated village of Korang. Fancy always having the enjoyment of such a view! To see the river rise during the rainy season and slowly fall in autumn and winter until it reaches its lowest level; to follow the struggles of water against the cold, and to watch the belt of ice on the banks growing broader, while snow accumulates on the flanks of the valley which are not too steep to retain it. At last the river is spanned by a bridge of ice, and the white covering holds it in its clutches. Then comes spring, the snow and ice melt, and the river rises; the passes that have been closed by snow so long are open again for traffic. The Sutlej comes to life and the people of Korang can hear the pulsations of its movement month after month.

From Rongtotke-la to the bridge of Lopchak we descended 3906 feet in two hours, for the Sutlej here lies at a height of 9784 feet.

While the men were putting the tents in order I made a closer examination of the bridge. As at Kyung-lung and Totling nature has done most of the work. A huge boulder lies on the right bank of the river, and there is solid rock on the left. Between the two the river is squeezed up to a breadth of 74 feet. A broad flight of stone steps leads to the upper slab of the right bridge-head, where a passage or portal of stone bears a small white *chhorten*. The

vaulted roof of the portal is richly ornamented with fresh paintings and prayer formulæ for the edification of those who trust their lives to the wretched planks that swing over the stream. The usual trunks which support the bridge itself are firmly fixed in the Cyclopean wall of the bridge-head. The upright stone pier of the left bridge-head is built on a slanting ledge of rock, and looks as if it might at any moment slip down into the river. In this wall also tree trunks are inserted, and thus the span of the bridge is shortened by several yards. In other respects the construction is of the usual design, two beams with joists of wood, planks, and boughs irregularly placed. These are held in position by posts attached to the beams below the wooden joists. The beams are fastened at the bridge-head by blocks of stone, which unnecessarily add considerably to the weight.

I take up my position where the suspended part of the bridge commences, and there can see that the whole structure dips under its own weight in an uncomfortable curve. Below me the great river tosses as it is sucked in furiously between the bridge-heads. Any one who is not quite sure on his feet had better keep off this bridge, for it is narrow and has no balustrade, and through the chinks between the planks the boiling water is seen, and one feels as though the bridge were rushing upstream. An involuntary start may pitch a man over. A skilled swimmer, however, would probably work his way out again. In the middle of the bridge the woodwork is 24½ feet above the water.

The bridge was doubtless not so bad when it was new and the two beams were fairly straight. But now it is old and badly worn, and hangs askew in an alarming manner. Its woodwork has been drenched by heavy rains, heated and scorched by the sun, covered with snow in winter and eaten into by frost, and under a load a trifle too heavy the two beams would snap like glass. The worst is that the beam on the upstream side makes a much greater curve than its neighbour, so that the whole bridge as seen from the right

bank tilts to the right. There is, therefore, a danger of slipping and falling, and all the more because several cross planks have been worn smooth.

The inhabitants of the village of Korang, who are responsible for it, said that they had intended to restore the bridge during the last low water, but after mature consideration they came to the conclusion to rely another year on the protection of the *chhorten* tower. I expect that the bridge will one day strike work, when it can no longer bear the traffic. " If I can only get over safely, it may do what it likes afterwards," is, no doubt, the thought of every traveller. So I, too, thought as I sat up there looking at the rotten planks which hung over the formidable Sutlej, and shook and swayed back and fro even in the gentle breeze blowing in the valley.

I drew for perhaps an hour. But no one came. Was the critical moment so near that no one would venture over any more? No! Tripping steps are heard on the steps. Two Tibetans drive fifty goats laden with salt up to the small open platform of the bridge-head. The men shout and whistle shrilly, but the goats will not move from the spot. And when goats get any notion into their heads, there is nothing to be done with them. One man seizes two goats by the horns and drags the refractory, jumping and rearing animals out on to the bridge, while his comrade drives some others after him. Encouraged by this sight, the whole troop dashes suddenly over the chasm. It is a wonder that none of the four-footed lunatics is pushed over the edge. The bridge sways up and down; surely one more goat would cause it to give way. I drew a breath of relief when the whole troop was over and disappeared in a cloud of dust among the hills on the other side.

CHAPTER XXX

FAREWELL TO TIBET

SUCH heat as in the night of August 25 the minimum thermometer had not marked for two whole years; we had 54.1°. Accompanied by Tubges I went off to the bridge. As a herdsman from the Shyok valley, accustomed to the wildly fissured dales and the foaming summer floods and the shaking bridges of Ladak, he was considered by us all as the most surefooted, and therefore my maps and notes were to be committed to his care. The valuable results of nine months' work lay packed in three small boxes from Tokchen, and Tubges was to carry them over one at a time, so that should he stumble all would not be lost. He crossed over safely with one box, balancing himself on straddling legs, before I thought of suggesting that he should crawl over and push the boxes before him. When the other two were safely deposited on the other bank I felt relieved, and sat down on them to watch what would happen next.

With a bale on his back Suen came up to the bridge-head. But when he saw the swinging stage and looked down on the whirling water he stopped, shook his head, and turned round. The bursts of laughter of his comrades goaded him on, and holding his breath and carefully balancing himself, he walked on, and when he had come safely over began to dance and sing, and he took a solemn oath that he would never set foot again on this bridge. Gulam, Kutus, and Lobsang went backwards and forwards to carry tents, bags, and saddles over to the left bank, and soon all the baggage was transported.

Now came the mules and horses. A smart old man of Korang, who knew all about the bridge, came of his own accord to offer his assistance. The first mule crossed, feeling his footing at each step, and his comrades followed with the same cool composure and intelligence. Then the old man from Korang led a black horse safely over the bridge, and was just as successful with another. A third horse did not like the look of things, but soon consented to follow his leader.

The two white horses were the worst, as usual. The large one jibbed at the sight of the bridge, backed so far over the top of the stone wall that his hind legs slipped over the edge, and he would certainly have fallen and broken his neck if two Ladakis had not rushed forwards and held him till help came. While he was recovering from his fright the old man took my riding horse by the halter and stepped on to the bridge. I expected to see him plunge over again, but the horse kept quite quiet, and followed the man, only quickening his pace a little as he neared firm ground.

The old man of Korang seemed to possess an especial gift of overcoming the fear of refractory steeds for the bridge. He induced the other white horse also to follow him, but the animal wished to make short work of the job and began to gallop so fast that the bridge shook more than ever. It was a grand feat to gallop over the wretched thing without slipping or putting his feet between the joists. He came over trembling in all his limbs, and then there was general jubilation.

The caravan was laden and the day's march was commenced along the left bank, where a fine long *mani* wall was erected, and the river roared beneath us. Rokti-chu is a small side valley with a turbulent brook, spanned by a bridge of the usual kind. Then the slopes become less steep, and we recede from the Sutlej.

A bend in the road and then the roar of rapids again reaches our ears. Beyond it lies the village of Chok, the

most idyllic spot I have seen in Tibet. The road traverses quite a park of poplars and willows, and half-ripe yellow fruit hangs on the apricot trees. Small runnels ripple among the trees, and pleasant cool shade is afforded by the dense vaults of foliage. Here and there a hut peeps through the leaves, and a streamer pole stands beside the smallest temple I have ever seen. Above the park stands the village itself in the form of an amphitheatre, with a grand view of mountains and valleys, and the road runs on a level with the roofs of the uppermost row of houses, on which apricots are spread out to dry.

For a time we follow the foot of a cliff, and then mount rapidly over solid rock, gneiss, and mica-schist, where the road is improved with stone walls and hurdlework. Then over more rapids we come to Largyep, where the villagers are engaged in mowing their fine crop of barley. Up and down we go into valleys and out again, past long *mani* walls and through a solitary *chhorten* gateway with portraits of Buddha as ceiling paintings, to whom the gods of the mountains pay silent homage. At last the path shoots headlong to the bottom of a valley, where the brook Salve-chu tumbles down with a deafening noise.

The bright frothy water rushes in reckless rapids over round, smoothly-polished boulders, hisses, whirls, and seethes as if it could not get down quickly enough to the Sutlej. A firm bridge affords us a passage over the Salve-chu to the left bank, and over steep rocky slopes we come to the end of our day's march, Shipki, our last camp on the sacred soil of Tibet.

Shipki was also my finest camping ground in Tibet. The tents were pitched on a grassy slope, where there was a sweet fresh odour of soil and juicy grass, and the apricot trees afforded cool shade. The wind blew in strong gusts, and produced a pleasant rustle in the trees, while the Salve-chu murmured at the bottom of the scarp. On a higher slope of the bank stood an agricultural village, and gigantic peaks kept guard in the background, veiled in

dense clouds. As though to render our halt near the village more agreeable, men and women presented themselves, calling out politely, " Salaam, Sahib," and bringing small presents of butter, milk, and fruit. No one showed any disposition to stop us on the threshold of India.

The night was calm and mild, with a temperature of 56.3° ; the stars twinkled through the foliage of the apricot trees, and blustering wind and rushing water lulled us to sleep. We were in marching order early in the morning, and prepared to mount to greater heights, accompanied by crowds of beggars and flies. The former placed themselves in our way at every turn, holding out small bouquets of flowers. They were the last Tibetans I saw, and how could I refuse them a trifle ? They gradually disappeared, and the winged pests also became fewer as we mounted. The flies which swarmed round us on the other side of the pass were British subjects.

We had, fortunately, picked up five yaks in Shipki. We could, therefore, spare our own animals in crossing the pass. The climb begins as soon as we leave the yards, fields, and conduits behind us. The path winds steeply up between boulders and pebbles, over marshy furrows with rank grass, over purling brooks, and along troublesome slopes and dome-shaped hills. In the narrow hollow of a flat ravine lies the last tilled field belonging to Shipki. At Yayur begins the hardest ascent, and here we must go slowly. The animals take two steps, and then have to stop to recover their breath. Even the yaks breathe heavily. They stare with their bloodshot eyes, and their purplish tongues hang dripping from their mouths.

High up on the other side of the Sutlej monks of the monastery Puri-gompa enjoy a splendid view from their loopholes. Yonder rises the wildly fissured, wonderfully beautiful summit of the Rio Porgyul above this world of majestic mountains, but clouds often spread their veil over the brow of this giant. It stands there like an outpost of the series of royal peaks which stretch their arc along the

north of India, and contain among them the highest in the world.

Behind us, in the direction of the bridge of Lopchak, we see the Sutlej meandering down below and struggling with the mountains, an overpowering view, a scene of sublime grandeur such as only the Himalayas can display. The whole valley lies like a bottomless abyss below us, and around us tower the crests, their battlements piercing the clouds. We have ourselves climbed so high that wisps of cloud, pure white like steam, conceal the valley from us at times. Now and then a little drizzle falls, and the air is cool. Not far to the right we descry the point of the rocky ridge up which we are painfully toiling to the Shipki-la. From its edge there is a sheer fall to the dizzy abyss in which the Sutlej has carved out its wild breach. Never has human eye beheld the cliffs of that dim foaming cutting. Will a way ever be blasted through it, a road which will save caravans the crossing of the Shipki-la?

After a last very trying ascent we are up at the cairn. The yak-drivers called the pass Pimig-la, but said that it was frequently named Shipki-la, after the village. The height is 15,404 feet, and we have mounted 5620 feet again from the Lopchak bridge, so deep has the Sutlej cut into the Himalayas at this point. Unluckily, the view over the mountains on the Indian side was intercepted by thick clouds, beneath which only the huge valley was visible, but not the river, as it lies in too deep a trough.

It is the last time we shall be so high above sea-level. Now we are going definitely downwards. But not at once. First, we must cross a bowl-shaped hollow, with a pool called Tsokam and a small glacier brook. Here, at Pashagang, is the boundary between India and Tibet. I stop a couple of minutes on the farther margin of the hollow to bid farewell to Tibet. My sight did not range far into the realm of the Trans-Himalaya, but a motley procession passed before my eyes of wonderful memories and strange adventures among the mountains that shut in the prospect.

Here ended not a chapter, nay, a whole book was closed at the Shipki-la.

On Indian ground we speed down quite passable slopes, but soon the gradient becomes steeper, and we return ever more rapidly to the denser layers of air above which we have been raised for a few hours in crossing the pass. Stones and rubbish rattle round our feet, a flock of sheep slips past us in a hollow, a crystal clear rivulet shoots down a granite ledge in the entrance of the valley Kamlung, and finally we slide down a steep gully between bushes and boulders to a point where a view opens on the village of Namgya-rijing, its waving fields, its leafy groves, and its jungles of luxuriant vegetation.

A field just mown offered a suitable site for camp 484. The height was less, but we were still far above the Sutlej. Down below are seen more villages on their flat platforms. On the right side wild precipitous rocks rise to dizzy heights above the river. This view is unspeakably fine and fascinating. Violent gusts of wind sweep the steep flanks and whistle through the hedge of wild roses which barricades our tents.

The villagers are Lamaists, speak Tibetan, and wear round their necks cords with sacred talismans. The loose bulging skin coats are seen no more, the fashions being modified from the Indian side, and the men wear thin close-fitting coats. Our host had a short-cut grey beard and a little cap on the crown of his head. He was named Hira, and was the Numberdar, or headman, of Namgya-rijing. He had seen many Sahibs, and when he came to us to give me an armful of sugar beet, he asked if he could oblige me in any way. Yes, he could request his colleague in Poo by letter to have everything ready for our passage of the Sutlej on the following day. He told us that lower down in the village of Tovaling ten persons had lately died of smallpox. An Indian doctor had come up and vaccinated all the inhabitants. When the yak-drivers from Shipki heard this they begged me to let them go back at once.

They were well paid, and they made their way up to the pass again. With them the last band was severed which had connected me with Tibet.

I write August 28 in my diary. The road runs down shelving declivities full of rubbish, and is lined on both sides with thorny thickets. Near it lies Namgya proper, and is succeeded still lower down by the village of Kapp on a hilly terrace. Here the Sutlej emerges from its corridor, the descent becomes more gradual, and beyond a *chhorten* portal we march along the bank some 150 feet above the water. But still we go up and down according to the form of the steep slopes. Here it is not pleasant to ride on a horse which comes from the more level parts of the Trans-Himalaya. Often the road runs like a narrow stripe over an extremely steep declivity, falling immediately down to the heavily thundering water. The cliffs on the right bank seem perpendicular, and dirty grey waves wash their feet. Granite alternates with dark mica-schist. The bottom of the grand valley, which we saw so far below us from the Shipki pass, is a fine sight. Now we are, as it were, in a mouse-trap, and feel uncomfortable at being below colossal cliffs and peaks. A landslip, and all thought of escape would be absurd.

Ah! I cannot suppress an exclamation of astonishment as I look into the Tidang valley, where a mountain stream forms a white foaming fall with a tremendous roar, and carries perhaps 530 cubic feet of water. It is pleasant to linger a few minutes at the fine bridge below the fall. A little farther down the Sutlej makes a bend to the right, and in a valley to the left lies the village of Tovaling which has been attacked by smallpox.

Here the messenger Ngurup Dorche, who had to carry the message to Poo, dashed past us. It was when we had only a short length of road to traverse to the passage of the Sutlej. The message stick was handed to him, and he vanished swiftly along the road with it.

We follow in his track. A landslip which has carried

away the road detains us a good hour. We have to dig a new path with our own spades in the steep slope, after which the men lead the animals carefully past the place lest they should fall into the river, and then carry over the baggage. Again the road runs upwards and skirts the outer edge of a cliff which falls vertically, or even overhangs. Grass and shrubs have taken root at the very margin. Whoever stumbles here falls head first into the river. The right bank is similarly formed, and the river passes through a gigantic trench deeper than it is broad, and both in front and behind its cross section is that of a dark rocky portal.

Down here it is warm. The confined air lies dense and heavy over the river. We halt and drink from springs and rivulets which bubble up from the bosom of the earth. Here no breeze can reach us.

At last a precipitous cliff forces us to descend to the edge of the water, where we see the billows of the river rolling swiftly beside us. Then we go up a slight rise again to the platform of a projecting rock that hangs fearfully over the deep trough of the river, and where not the ghost of a bridge is to be seen. But Poo lies on the other side, and we must get over.

CHAPTER XXXI

BETWEEN SKY AND WATER

WE had now arrived at the head of the bridge which is described in Captain Rawling's narrative *The Grand Plateau* (p. 303). Accompanied by Major Ryder and the other members of the expedition to Gartok, he crossed the Sutlej here just at the end of the year 1904. He says:

> Ten miles below Khub (Kapp) a great cantilever bridge, regarded as an engineering triumph, spanned the Sutlej, carrying the road from the left to the right bank. It had only been completed and opened for traffic in the autumn, and was looked upon by the natives with awe and admiration. But for us it was to be of no use. The timber, obtained from the neighbourhood, proved to be exceptionally brittle, for, three weeks before our arrival, the lower beams gave way close to the piers, and the whole structure was precipitated with a crash into the torrent below.

For the Englishmen a temporary bridge was built between the ice-lined banks. But for us there was no other resource but to trust ourselves and our belongings to a cable of wire strands stretched between the stone piers.

We collected our animals on the stone ledge above the left bridge-head, and looked around in vain for the help without which the caravan could not make use of the cable. Not a living creature could be seen, not even a wretched hut was erected as a watch-house beside this dangerous passage. Imagine a pitch-dark night, dense fog, and a traveller who, trusting in the existence of a

bridge, climbs to the bridge-head, and thence, stepping into empty space, falls into the Sutlej. Poo stands high up, and is hidden by the mountain flanks. Neither by shouts nor signs can we attract the attention of the inhabitants, and a gun-shot would hardly be heard over there.

I step out on to the balks of the bridge-head. They project like a spring-board into empty space. Eighty feet below me seethes the compressed river. It seems as though our progress were stopped here and Simla hopelessly far away. I learned afterwards that the passage was purposely closed on account of the smallpox, and no travellers were allowed to come from the other side.

It was therefore no wonder that the messenger had shown such carelessness in delivering his message. Ngurup Dorche was sitting brooding at the bridge-head when we came to the unlucky spot. A man must be an acrobat to wind himself over on the cable without assistance. There are many such acrobats among the natives. They simply sling their cammerbands over the cable and hitch themselves along backwards. Ngurup adopted another method. He took the wooden frame of a mule's pack-saddle, placed it astride on the cable, wound a rope a couple of times round the wood, and put his legs into the loops thus made. When he was satisfied that all was secure, he grasped the cable with both hands and drew himself along backwards. I must admit that it was an awful sight when he had passed the outer edge of the spring-board and was dangling above the chasm. As long as the cable dipped down to the lowest point of its curve it was easy to move along, but hard on the ascending section. I breathed more freely when I saw him hanging over the right pier of the bridge. There he sprang out of the loops and vanished like an ibex over the hill on the way to Poo.

While we waited a fire was lighted, and Gulam put on water for tea. I examined the nasty place more closely. Mica-schist crops out on both banks, and the tall piers between which the bridge once spanned the river rest on

a firm foundation of rock. The right bridge-head consists of an upright buttress in which balks of timber are built in horizontally, and the cable is carried at a height of six feet above the level stone platform to a perpendicular post, and thence to its anchorage in the ground beyond. On our side the wooden beams of the bridge are still in the stone dam and carry a platform with a parapet. The cable passes above the boarded footway, here also at a height of six feet, to the top of a firm post, beyond which it is wound round a capstan, and therefore it can be tightened when it has stretched too much. Usually travellers and goods are transported over the river by means of a pulley, which slides along the cable and is fixed in a block which keeps it in place. Men and animals are secured to a hook underneath the block and are drawn over easily and quickly. But now the pulley was broken, and we had to resort to some other contrivance.

I lay myself down on the bridge platform and carefully hitch myself forward to the edge. Just below me tumbles the mighty river, one of the giants of the Himalayas. Immediately below the stone pier two colossal boulders have fallen into the bed, and between them and the right rocky wall the river is compressed into a space of perhaps twenty-five feet. The whole Sutlej seems here changed into a squirting jet which bores through the mountains with marvellous energy. The white foaming volumes seem to dive under the boulders and disappear, only to shoot up again in boiling bells and vaulted hillocks of water. The whole is like a gigantic boiling cauldron. The noise is like growling thunder: it reverberates among the cliffs, it is deafening to the ear, and one feels dizzy and under the influence of some magic power that playfully attracts one down to the flakes of foam under which the Sutlej dances along its Berserker course raging furiously and white with wrath. I can hardly help feeling frightened. What if the beams now gave way while I am lying here gazing into the depths? What if the cable parted with a loud report

as I hang over the river? Well, all would soon be over. Before I could really feel my heart coming up into my throat with horror I should come out of the whirlpool between the blocks as a chopped-up, well-soaked beef-steak.

But the cable will hold, I am told, though it is as thin as a cord. It is said to be 115 feet long.

It must be a good way to Poo, for Ngurup does not come back. Patience! Out with the sketch-book; I shall never forget this place. The stone platform of the dam on the right bank is only a stone's throw off, but the way to it lies through the valley of the shadow of death. All Tibet lies behind us, and yet we have never stood in front of such an awful fissure.

At last our waiting comes to an end. Yonder a party of men are hurrying down the slope. They are natives of Poo, but there are also two Europeans with walking-sticks and sun-helmets. They mount the dam quickly, and greet us politely. I have forgotten how to take off my hat, though fortunately I do not put out my tongue, but flourish my sketch-book frantically. We can see how eager they are to get me across as soon as possible. Ngurup has given them my letter. They know, then, who it is that now wishes to return to civilization after a sojourn of two years in Tibet—contrary to the wishes of four governments, of England and India, Tibet and China, not to mention the treaty concluded in 1907 between Great Britain and Russia, one of the objects of which was to prevent anything in the way of exploration for three years. They know that during that time I was my own master, and are curious to know how I have got on.

A native named Deva Ram, village magistrate of Poo, comes dangling under the mule saddle over to our side. We can see that he is accustomed to this little game, and would do for an aviator. After he has landed safely and saluted us politely, he ties some sacks and a tent under the saddle, to which a strong thin cord is attached and held by

the men on the other side. Deva gives the signal, and soon the whole load is in their hands.

Now the Europeans begin to gesticulate, make signs, and point towards Poo. I do not understand them. One of them writes a few lines on a piece of paper which comes over with the saddle. The message is: "Please wait a little longer; we have sent to the village for a pulley-block." All right. The saddle, then, is not safe, and I am glad to wait.

The block came, and was drawn over to us. Kunchuk tried his luck. It was a joke to see the faces of Suen and Lobsang when their comrade was suspended over the chasm. They were almost sick with horror, and had to turn away. Suen rolled himself up like a hedgehog behind the capstan, and wept bitterly.

"What is the matter with you?" I asked.

"It is terrible that we must all die here after we have come so far and have only a little farther to go."

"Oh, do not be stupid, Suen; there is really no danger."

At the bottom of my heart I envy Kunchuk, who has already made the deadly passage. But in the meantime I have to see that my valuable notes are securely fastened and go over safely. And then I want to know what is to be done with the animals. One of the sensible mules is led up, and stands just under the block. Four strong bands of rope are put round him, one under the root of the tail, one supporting the neck, the third slung round the body in front of the hind-legs, and the fourth behind the fore-legs. The eyes of the victim are covered. The mule stands patiently quiet, but the trembling of his legs shows that he suspects some dirty trick. Ready! The men on the other pier begin at a given signal to pull with all their might. The block slides slowly along the cable. The mule is forced to move, and he walks with unsteady steps towards the river, after a vain attempt to resist with outstretched hoofs. He feels his feet leave the ground,

and stretches his legs out, but cannot touch anything. Next moment he is sailing through the air above the tossing river. He has submitted to his fate, and his legs hang limp. What else could the poor creature do? But the agony is short; his forefeet strike the edge of the stone pier, he feels firm ground under his feet, and stands as patiently as before until he is freed from all his fetters and is sent off to graze on a bank.

Now it is my turn. "The earth vanishes; the Gyallar horn sounds the summons to the feast of the gods."

Deva Ram must think I am very heavy for he ties me up as fast as a dangerous criminal. I slip my legs into the loops of rope, and grasp the front cheek of the block firmly.

"Off!" I call out.

"No, Sahib, not yet," answers Deva Ram.

"What more is wanting?"

"The tackle will hold all right, there is no fear of it; but any one who is not accustomed to see the river below him may become giddy, lose his senses, relax his hands, throw himself backwards, slip out of the loops, and fall head first into the Langchen-kamba."

"I shall not be giddy."

"Still, for safety's sake, we will take a turn of rope, or better two, round your body and the other ropes. There, now all is right. Now you may loose your hands, Sahib, without falling."

"Off," I cry more loudly than before.

Deva Ram gives the signal, the block begins to glide, and I am suspended beyond the brink, and see the greyish billows of the river rolling beneath me. It seems an age. Why am I not already across? It is only 115 feet. Above on the heights is my old Tibet; down in the plains is India. My caravan is torn asunder. I myself am dangling between heaven and the murderous Sutlej. I have explored this river and discovered its ultimate source. Surely the discovery demands a victim! I never entertained such great respect for this grand majestic river as

at this moment, and suddenly I realized the meaning of the *chhorten* pyramids and cairns of the Tibetans on banks and bridges, those cries for help against the uncontrollable powers of nature, and those prayers in stone to inexorable gods. My eyes fall on the gigantic white cauldron boiling in the abyss below. 'How magnificent, how ravishingly beautiful! Language has no words to describe it; no artist can depict this scene, the dizzy bird's-eye view cannot be reproduced on canvas. Only a model could give some notion of it. Only the droning of the thundering water is heard, repeated every moment. It fills the narrow chasm, and I hover among a chaos of sound waves crossing one another from all sides.

I swing about at every jerk caused by the pull on the rope. Hallo! Only two yards to the edge of the stone pier. Beautiful land! As the cable has held so long surely it will not now split with an ominous crack. Pull away! Only a yard more. With a comfortable feeling of security I glide over the pier, and in a moment am freed from all bands and fetters.

The two Europeans give me a hearty welcome in German, and congratulate me on having performed the short aerial journey without mishap. They are Moravian missionaries, and are named Marx and Schnabel. In a minute we are as well acquainted as friends of youth. We stay a short time on the platform to see Lobsang swung over with blindfolded eyes, for he could not trust his head, and he was very agitated when he landed. I also receive my white steed, and stroke his eyes and nose to quieten him. The others might look after themselves, and they were all over before eight o'clock, so that the whole crossing lasted quite five hours. The missionaries told me that an Englishman had turned back on seeing the cable.

Now we go up the steep ascent to Poo. Just as twilight comes we enter the narrow, lifeless streets of the village. Only a group or two of inquisitive women and some lonely strollers are out when we pass over the little market-place,

where the villagers assemble on winter evenings to amuse themselves with dance, song, and string music. At last we come to the missionaries' compound, and find that it forms a pretty little neatly kept village. A brand-new house in a garden is my abode during the days of rest.

I had not seen a European since August 14, 1906, and now I wrote August 28, 1908. For two long years I had associated with Asiatics, and I was glad to see men and women of German race again ; and worthier specimens of the white race than these Christian apostles and their wives I could not have met with. They shamed me with their hospitality and spoiled me like a child. They served me with the best the house afforded, clothed me anew, gave me books and newspapers to read, and were never impatient at my cross-fire of questions : Was the world at peace or did the torch of war blaze in any country ; how is it with the unrest in India ; have you heard any news from Sweden ? It is certainly pleasant to be spared for two years newspapers, telephone calls, stupid letters, idiotic receptions, and the inane chatter of the world. In so-called civilization we lead an artificial life, lose our individuality, and are picked to pieces by the gossip and base scandal in which society revels. It is pleasant to seek great solitudes where no commotion penetrates. But still, when the time of isolation is over, it is also delightful to find oneself in the swim again. One soon becomes accustomed to it, though one looks back not without sadness to the grand time when only a thin tent cloth separated one from the nights of the wilderness and the eternal stars.

I slept in a proper bed, and had a view of the garden where my men pitched their tents, and our tethered horses and mules could console themselves with better grass than they had ever seen before. Takkar and Little Puppy did not feel at home in these strange surroundings, and their Tibetan coats were not suited to this warm, oppressive air. They lay with their mouths open, gasped for breath, and snapped at the troublesome flies which left them no peace.

The village is divided into two sections. The poor live above, the well-to-do and rich below, the mission station. There are here 600 to 700 inhabitants, all Lamaists, who speak a dialect of Tibetan more akin to the language of Darjiling than to the patois of neighbouring districts. The caste system has spread hither from India. The blood also is not free from a Hindu admixture, and on the way to Simla it may be observed that Tibetan blood thins out, while Hindu blood becomes more conspicuous.

Wheat is cultivated here, barley and millet, besides buckwheat, which yields two crops a year. Only the missionaries try rye, and it thrives well. Poo lies too high for grape culture, but there are juicy bunches down by the river. Potatoes are planted in some fields, while beet, turnips, and radishes are grown generally. The mountain breezes rustle through the crowns of the walnut trees, and apricots and apple trees adorn the outskirts of the village. Of course poplars and willows are not absent, and the cedar or *shukpa* is the object of religious reverence. Spruce and birch occur above the village, but the deodar or Himalayan cedar thrives only on the west side of the Sutlej. Among bushes the wild rose and the whitethorn are the commonest.

Two monasteries belong to Poo. The upper is named Chila-gompa, the lower Poo-gompa. Thirty lamas of the red sect live there; these monks are allowed to marry. Most of the nuns live in the village, and occupy themselves in secular affairs.

Poo lies, indeed, high above the Sutlej, but yet in a hollow depression between lofty snowy mountains. In the height of summer a close stagnant heat, especially deleterious to European children, prevails in this hollow. All the white children that have died in Poo have been carried off in July or August. If a small child lives through August its parents may hope to keep it for another year. In September the nights become pleasant and people revive. Frost comes with the new year, and at the

end of January the river freezes for five weeks. Only its quieter reaches have a proper covering of ice. One such place is above the cable; here the river may be crossed on planks which are laid on two boulders which stand at the edge of the ice fringe.

August 30 was a Sunday, and a service was held in the small chapel of the mission. The congregation consisted of perhaps fifty people, including a few children. The men sat on the right, the women on the left of the pulpit. My men also attended and listened with great astonishment to the singing and the words of the preacher. The tones of the organ sounded gentle and peaceful, and in the tongue of their country the Christians sang a psalm to the tune of "Glory to God in the Highest." It was wonderfully beautiful. I wept from emotion in the little lonely church among the majestic mountain masses of the Himalayas. The two years flew like a dream before my mind. Through the window is seen the bright sunny landscape, the threshold of my beloved Tibet, the royal demesne of unfettered freedom, and now I am about to bid it a long farewell.

Festoons of ripening apples hung down among the leaves, and cackling hens stalked leisurely about the yard. Quiet and devout the congregation listened to the words of the preacher which sounded through the small building with gentle conviction.

Amen! Our Father. . . . Another hymn was sung, and with solemn faces the Christians dispersed to their homes.

The missionaries take me round the premises of the station. They tell me that the Himalayas are in the Moravian mission district No. 13, and that work was commenced in 1853. The Poo station was founded in 1865, and the first couple of missionaries were Mr. and Mrs. Pagell, who both died at their post in 1883, and were buried in the little graveyard above the chapel. A stranger stands thoughtfully and bareheaded before such a grave. They went into exile of their own free will, and

sacrificed their lives for their faith. At home only a few friends inquired about them, and here perhaps they met with little gratitude and encouragement, but these preachers of the gospel fought for the highest of all earthly aims.

How sad and affecting to see these children's graves with their fresh or already faded wreaths! There one can read the names of many children who only came into the world to be baptized and to die, and of many who during their brief existence saw no other white faces than those of their parents, and no other scene than the Himalayas round Poo. Unknown to the world, pure and innocent, the little people slumber under the perishable inscriptions of their tombstones. Mr. and Mrs. Schnabel had three children in this churchyard, and one had died in the Red Sea on the voyage home. Mr. and Mrs. Marx had consigned their only child to the soil of the Himalayas fourteen days before, and fresh wreaths adorned the little mound. Some gravestones had inscriptions in Tibetan characters, not the everlasting, inane "Om mani padme hum," but Christian words, for beneath them rested villagers of Poo who had received baptism.

Solemn and profound is the atmosphere which reigns round these abodes of peace and forgetfulness. The eyes roam over wild grand valleys, and on all sides sharp pinnacles of rock form a guard of honour. The troop of monsoon clouds floats under the vault of heaven towards Tibet, and the stars of the winter night sparkle gently over the graves of Poo.

CHAPTER XXXII

A LEARNED LAMA FROM HUNGARY

WHEN I set out from Poo on August 31, I had 200 miles to travel to Simla. A few hearty words of thanks to the missionaries' wives, a vigorous shake of the hand with the missionaries who escorted us to a bend in the road, and then we go off along the winding path through the state of Beshahr.

Here I travelled over a country which had been well known for a hundred years, and which had been thoroughly mapped by the topographical survey. I could therefore pack up my map-board and ride on free and unhampered without having to think of minutes and bearings. For two years I durst not omit to notice the smallest crook in the road, but now I had a holiday after a long period of work. Now I looked as long as I pleased at this wonderful country, noticed the villages and men who now become ever more common appearances, and gazed at the lofty mountains, the foaming river, and above all the vegetation which became more and more luxuriant, and passed gradually from high alpine forms to sub-tropical, and, finally, at the foot of the Himalayas, into tropical. As before, I could remark the increase of heat with the decrease of height, and the life and activity of man which beat with a stronger pulse every day we drew nearer to our destination.

After Poo our animals have no work to do. We employ coolies, in the English fashion, to carry our baggage. Fifteen coolies, men and women, carry our loads on their

strong shoulders, while our animals tramp unladen, and even without burdens have to exert themselves enough to get over some awkward places. Beyond a sharp ridge of rock we have the Sutlej far below us on our left. Then follows a series of small projections and spurs, where the road is so dangerous that we must often help ourselves with our hands, if we would not lose our balance and fall into the water that rolls hundreds of feet below us. The road clings like a cornice to the cliff which often overhangs. Imagine this road where nature has done everything and man has not assisted with a single blasting charge! Branches, boughs, and slabs have, indeed, been thrust into all the crevices to provide steps and some little protection on the outer side, and at two places there is some attempt at a balustrade, but otherwise this road, with its abrupt sections and dangerous slides, has been formed by weathering.

Accustomed to the fresh air of elevated Tibet we are always perspiring; 77.7° in the shade is too much for us, and yet this is only the beginning of the heat which awaits us, and from which I shall not escape until I come to Shanghai and Japan. My men will have done with it when they get home to Ladak.

The rocks on the left side are just as abrupt, and there also a path has been levelled which connects Tovaling with Nesang and Morang. In the distance it looks like a fine thread on the cliff, a suitable contrivance for rope-dancers and suicides.

Beyond a difficult passage through strongly folded dark mica-schist, we march up a rise with a cairn, and then go down headlong by many hundred zigzags to the bottom of the side valley Sha-lungpo. There flows a river with water of the purest bluish-green, and the foam flakes of its falls and rapids float like white soap-suds on its surface. A small level spot on the left bank affords room for our two tents and the camp-fires.

Ngurup Dorche had left us and gone off to his home

in a village close to Poo. The beggar from Chiu-gompa was still with us, and like the others had nothing to do. Beside me walked a young guide who was smart and active as a cat. We had passed our coolies half-way along the road and had to wait a long time down by the river bank before the undulating file appeared as small dots on the slopes. We saw sometimes their fronts, sometimes their backs or sides, according to their position on the zigzags; gradually they grew larger, and at last laid down their loads among the tents. There were some young girls among them and two of these were really handsome. I felt ashamed that these princesses of the wild mountains had to burden their shoulders with my baggage, while I was so comfortable myself. But my chivalry was out of place in the Himalayas, and the young ladies were quite pleased to work for their four annas a stage. I gladly doubled their pay, not only because it is absurdly small for such toil, but also because the black-eyed portresses were so indescribably charming.

On this road every fresh camping-ground surpasses the last in wild romantic beauty. In the Sha valley one seems to be shut up in a maze, and wonders how in the world one is to get out. On all sides nothing can be seen but narrow dells among abrupt wildly-fissured slopes. The Sha-lungpo leads like a corridor down to the colonnades of the Sutlej valley. It is no use to try and make oneself heard here. The Sha river, with its 700 or 800 cubic feet of water per second, forces its furious way through all obstacles to reach the Sutlej, and tumbling volumes of water drum against blocks and ledges a loud sonorous march of victory over the mica-schist. The heat confined in the valley lies heavy and oppressive over the water. But I have only to stretch my hand out of the tent door to fill a cup with wonderfully refreshing water at a temperature of only 50°. During the night the temperature did not fall below 62.1°.

The shades of evening fall sooner in the narrow valley, and it is dark earlier than on the open flats above. The

fires flame up high and cast a yellowish red light on the faces of the cliffs. The men move about like ghosts; they can only be seen, for their steps cannot be heard nor their voices, only the overpowering roar of the river. The tent stands open to let in the light draught produced by the stream.

The sun rises on another brilliant day. We have now to cross the river. After rain this river rises tremendously and floods the small spot where our camp is pitched. It is much too broad to be bridged over. It was now impossible to wade through with laden animals, for probably a horseman would have been swept down to the Sutlej. Therefore, a cable, as at Poo, has been stretched across the bed which in the middle of the valley is only 11½ feet above the water. Now only a third of the cable need be used, for the river runs in a single channel along the right bank, where the cable is anchored in a very steep slope above a level stone wall which serves as a landing-place. The loads are carried to the bank, and at the top of a stone heap lying in the bed are fastened to the block of the running pulley. Then the whole pack is drawn over to the stone dam on the right bank, where fresh coolies are waiting to take charge of them.

The men are conveyed across in the same way. The horses have to look after themselves, and can scarcely keep their feet on the bottom of the bed, and resist the rush of the water. Two small mules are pulled across with a rope. Takkar swims over, but Little Puppy is sent by cable.

The Sha river is said to be the boundary of the Kanam district. The ascent from the right bank is very perceptible, and the road makes sharp short windings through abrupt fissures, where high shafts of masonry have been built up to support the path, past shady nooks and under dark-green canopies of pine trees, higher and higher, until at length we reach a saddle called Tungnang-la.

Just below us we see the Sutlej and the place where

the metallic green water of the Sha river is swallowed up by the dirty muddy flood of the main river and disappears instantly. A small commencement of a pebbly delta has been mercilessly cut off as with a knife. The Sutlej suffers no useless hindrances on its way. Just opposite on the left bank debouches the Tomba-chu valley with its stream, and therefore the place is called Sumna, or the meeting of three valleys.

The Tungnang-la does not suffice us; we mount still higher and pass a cairn which stands like a landmark high above the wildly tossing river. But now the corridor is so steep and deep that we only now and then catch sight of a small stretch of the Sutlej. It would be dangerous to ride here, so I go on foot. Tubges, Kunchuk, and Suen drive our unladen animals past us: the effect of the refreshing bath has not lasted long; they are sweating and their heads droop; but they keep up well.

Takkar is in a worse case; he must suffer terribly, for he takes short quick breaths and lets his dripping tongue hang out of his mouth. Whenever he sees a cleft with cool shadow he stops to rest there. Then he runs past us to crawl into some other hole. He drinks from every rivulet, laying himself down on his stomach in the water. He is afraid of the heat, smells danger, and broods over secret plans. What is he thinking of? He perhaps recalls to mind his youth on the bare breezy heights of the province of Bongba, and thinks of the March day when he was forced to leave his master and his home for ever. He had offered desperate resistance and none of us durst go near him. Afterwards he had quietly submitted to fate and had been as true to us as gold. How often had he saved me from spies, keeping jealous guard before my tent? Now he is thinking it all over and believes that he has been betrayed by us. Totling was all very well, and the Shipki-la was a glorious place which reminded him of Bongba. There he saw yaks for the last time. But the heat of Poo was detestable, and now

we were still following the great river down towards the sea. Takkar told himself that it must become hotter the farther we descended, and the scenes of Bongba returned more clearly and sharply to his memory. Thus he thought as he ran from one shady place to another. He felt that all ties were loosened and that really he was a stranger among us. He felt like a hen when she sees the duckling she has hatched swimming in the water and cannot follow it. Now he rushes past us to look for another shady spot. We march on and neither see nor hear anything of him. Perhaps he will wait and follow our track in the evening. No, there he comes again. I call to him, but he does not obey as usual, he does not see or hear, he throws himself helplessly under an arching rock. He is in despair, and knows that we are leaving him for good.

Parango is the name of a place where the path runs across a huge detritus fan. The guide informs us that it is dangerous in winter when avalanches roll down and landslips fall. After heavy rains also it is wise to make all speed in passing Parango.

Tsarak-tatang is a side valley with a murmuring brook; high up on a hill at its flank stands a hut among tilled fields. Here and there conifers make a rather thin wood, and a rest is agreeable in a ravine near Kamurti. Immediately opposite we have a bird's-eye view of the large Nesang river, throwing up white froth against the boulders that fill its rapids, but flowing calmly with a dark-green colour at its mouth.

From a commanding promontory where the cairn Kanam-laptse stands we enjoy for a moment a magnificent prospect. Deep down in a side valley lies the village of Kanam, and farther off Pill and other villages. But the finest sight is the background formed by the nearest snow-clad summits of a huge Himalayan massive which is known by the famous name of Kailas. In the peculiar illumination, and in an atmosphere apparently saturated with warm vapour, its firn-covered peaks make a deep and

imposing effect. Steely-blue clouds and round white fleeces form white beds round the higher parts of the mountains, and the blinding white summits rise above this sea of aerial surge.

We descend to the village of Kanam. Without a guide we should surely go astray in this confusion of narrow lanes, passages, and small squares between houses, walls, terraces, fields, and gardens, among which canals here and there cool the air with tiny waterfalls, or which are interrupted by actual jungles of extremely luxuriant vegetation. The houses remind me of Kashmir; frequently the beams project on all sides beyond the walls to form verandahs and a shelter from the rain.

Our tents were erected in an open yard in front of the lower sanctuary which is called the *Kanjur-lhakang* because the holy scriptures are kept there. Naturally the first thing we do is to inspect the theological library. The hall is plain and not to be compared with those we have lately seen in Tibet. In the centre of the altar chancel towers a large *chhorten* called *Kudung*.

"Whose ashes does this *chhorten* contain?" I ask a monk.

"The ashes of a Grand Lama, Lotsava Rinpoche, who lived two or three centuries ago," he answers.

Locked cupboards stand on both sides and are opened at my request. They contain a number of small clay images. The Kanjur and Tanjur scriptures are kept in two clumsy heavy bookcases. Some volumes of the former are absent, for the monks are reading them in their cells.

The *Kache-lhakang*, standing higher up the village, is more important. The name signifies the "Mohammedan hall of the gods."

"Why is it so called?" I ask one of our priestly ciceroni.

"Because a converted Mohammedan served the temple." But one of his colleagues said, "No, simply because the architect was a Mohammedan."

The latter explanation was the more probable, for the whole architecture of the cloister court was exactly like the caravanserais in Yarkand. As there, the two-storeyed galleries were turned to the court, in the middle of which a thick-stemmed apple tree lifted up its crown. Such courts are, indeed, not uncommon in Tibet, but here the Mohammedan style is more pronounced than usual.

Stone steps lead up to the temple hall, where we meet again our old friends Sakya-toba, Chenresi, and Tsong Kapa. Some new *tankas* hang down from the roof and through its large impluvium daylight falls, gilding the pillars of the shrine.

"Where is the monk's cell which the European lama inhabited when he lived here?" I asked Gachen Lobsang Tarva, a monk about fifty-five years old, who was very amiable and friendly.

"Come with me, sir," he said, and led me on to the flat roof. From here we mounted an outside staircase ending in a verandah before a small room.

"Who lives here?" I asked.

"Lotsa Rinpoche, a Kanpo Lama, who is now on a visit to the Tashi Lama. But this is also the room in which a lama from Europe once lived."

A lama from Europe! It sounds very improbable and yet it is quite true. A wonderfully entrancing human story is indissolubly connected with the monastery of Kanam. A true story, in which the wildest adventures of Hajji Baba are combined with superhuman patience and the finest example of the suppression of self in the interests of science. We stand on the threshold of the cell in which the Hungarian philologist, Alexander Csoma of Körös in Translyvania, spent three years of his life.

His greatness and his reputation survive in the works he published. But his personality and his life are little known, and hence the mystical charm surrounding his name. A few letters from him and about him afford an insight into his thoughts and schemes. In the narrative

of one or another Himalayan journey his image flashes only rapidly before our eyes. It would take too long to dwell on all these narratives of travel. We will give here only a specimen. Captain C. Johnson on his journey from April to October 1827, visited the village of Kanam, and says in the *Journal of the Royal Geographical Society*, 1834, p. 56:

> There is in this city a Lama temple, and an excellent library. . . . Here they met with Tchoma de Coxas, an Hungarian traveller, who was there for the purpose of ascertaining the origin of the Huns. . . . He had been in Luddak, and had acquired a knowledge of the language, but having become an object of suspicion, he had come south, and buried himself in the library at Kanum. . . . He was not very communicative, and lived the life of a hermit, upon an allowance granted him by the Company.

In the book already quoted, *Die lamaische Hierarchie und Kirche* (vol. ii. p. 286), Koeppen writes of Csoma

> . . . who had made it the task of his life to track down the Uigur, the supposed ancestors or at least fellow-tribesmen of his people, the Hungarians, and he hoped, after searching fruitlessly for several years in Persia, Afghanistan, and Turkestan amidst hardships and privations, to finally discover them in some corner of the closed land of snow. But before trying to penetrate into that country he resolved to learn the Tibetan language, and studied it first in Ladag, then in Yangla, and lastly from 1827 in the monastery of Kanam on the Sutlej under the guidance of a literate lama, in spite of cold and want, with such heroic energy that at last he mastered it, the first European to do so, and at the same time acquired an exhaustive knowledge of Tibetan literature.

We can obtain a notion of the importance of Csoma's work from the following words of the present American Ambassador in Constantinople, the profound and learned Asiatic investigator W. W. Rockhill, in *The Life of the Buddha*:

> Any one who has glanced at the analysis of the Tibetan

Bkahhgyur by Alexander Csoma de Körös, published in the 20th volume of the *Asiatick Researches*, must have been struck with the wonderful patience and perseverance of this extraordinary scholar. Some idea of the extent of the researches which are embodied in his analysis of the Dulva, about the tenth part of the whole Bkahhgyur, may be had when it is known that it occupies more than 4000 leaves of seven lines to the page, each line averaging twenty-two syllables.

Let us take a glance at the career of this extraordinary man. I follow here the account given by Dr. Th. Duka in his book *Life and Works of Alexander Csoma de Körös, A Biography compiled chiefly from hitherto unpublished data* (London, 1885). Körösi Csoma Sandor, or Alexander Csoma of Körös, was born in the year 1784, and in his youth devoted himself enthusiastically to the study of oriental languages, theology, history of the world, and geography. When he was thirty-six years old he left his country for ever, and commenced the long journey which was to make his name known and renowned in the scientific world. He traversed the Balkan countries, sailed to Alexandria, and then made his way through Aleppo, Mosul, Baghdad, Kermanshah, and Hamadan to Teheran. At that time no Europeans lived in the Persian capital, except those attached to the embassies. Here Csoma enjoyed English hospitality until in the spring of 1821 he left Teheran in Persian dress to follow the ancient caravan road to Meshed, Bukhara, Balk, Kulm, Bamian, and Kabul. He almost always travelled on foot. From Constantinople to Bukhara he followed pretty nearly the same route as his famous countryman, Professor Arminius Vambéry, forty-two years later. It was a heroic deed he accomplished. At that time it was more difficult than now to traverse these regions unscathed. Csoma has left no account of his adventures, but from Vambéry's graphic description we may gain some conception of the troubles and dangers which Csoma must have encountered. In the year 1890 I travelled along the same road as Csoma, and can very

well imagine the privations he must have endured seventy years earlier.

Csoma passed through Lahore and Kashmir to Leh. On his journey back from Leh he met Moorcroft in July 1822, who had accomplished his memorable journey to Manasarowar ten years before. In Moorcroft Csoma found a sincere friend, stayed with him half a year, and received from his benefactor money as well as books and letters of introduction. Thus Csoma, through Moorcroft's intervention, was enabled to spend sixteen months in the monastery of Yangla in Sanskar, where with a learned lama and a servant he occupied a cell thirty square feet in area, and there plunged into the study of the sacred writings. He found that the 320 volumes which are the foundation of all Tibetan learning and religion are a translation of an Indian Sanskrit original. In grinding poverty and amid great privations he worked his way into this new world of knowledge. Winter was a hard time, the little room could not be warmed, and Csoma had no money for lights. Wrapped in a sheep-skin he sat all day over the Tibetan folios while snowstorms howled outside in the mountains.

In the year 1825 the Indian Government accepted his offer to continue his investigations at their expense. English rule had begun to extend itself over India, and it was important to learn something of the languages and religions of neighbouring peoples. The Government offered him a remuneration of 50 rupees a month. It was a gigantic work Csoma had undertaken. He found that the Kanjur consisted of 98 volumes, each two feet long and eight inches broad, and containing more than 300 leaves. The Tanjur had 224 volumes with 76,409 leaves in the aggregate, and had been translated and arranged by 3000 persons.

These years Csoma spent partly at Sabathu in Kulu, partly at Pukdal in Sanskar. On one of his journeys he came to Kanam, and there heard that the holy scriptures

were kept in the monastery of the village, whither they had been brought from Tashi-lunpo fifty years before. Therefore he determined to continue his studies in Kanam and received the sanction of the Government to a sojourn of three years.

About this time Dr. Gerard, who did such good service in connexion with the geography of the Himalayas, travelled through these regions and came to Kanam. In an interesting letter, dated at Sabathu on January 21, 1829, Gerard relates that he had seen the learned Hungarian in the little romantic village where he was dwelling amongst his books in the dress of the natives, and living like them on buttered tea. Under circumstances which would have driven most men to despair, he had collected 40,000 Tibetan words. His teacher and assistant was a highly educated and amiable lama named Bande Sangs-Rgyas PHun-Tsogs. The Hungarian reminded the English doctor of the philosophers of antiquity, for like them he was completely absorbed in his researches, and was blind and deaf to everything that was going on about him. But he was delighted with the unsuspected treasures he had brought to light from the gold mines of Tibetan wisdom, which would one day excite the astonishment of the learned world. He expressed, however, a fear that the Government might not appreciate his work; but on the day when he could hand over his grammar and his lexicon he would be the happiest man on earth, for then he would have carried out his engagement and could die contented.

He lived in poverty, for the 50 rupees a month were his only income. Half he paid to his teacher, his servant received 4 rupees, and his dwelling cost a rupee a month. Twenty rupees were, then, left to provide him with food, clothing, writing materials, and all other necessaries.

Gerard says:

Mr. Csoma's hamlet is at the extreme upper limit of the village of Kanum, at an absolute elevation of 9500 feet. Around him are the romantic abodes of monks, whose religious

ceremonies, their pious incantations, etc., have a singular affinity to Romish customs. Below is the monastery containing the Encyclopædia. . . . Mr. Csoma showed me some improvements he had made to his cottage ; one was a fireplace, which had cost him twelve rupees. . . . Two rustic benches and a couple of ruder chairs are all the furniture in his small abode.

In spite of all his poverty he retained an indomitable pride, and could not be induced to accept the smallest present from Gerard. Even the English newspapers Gerard sent him were refused. Rice, sugar, clothes, all were returned. The only things he kept at Gerard's earnest entreaty were an English Bible, which he read through in eight days, a Latin and a Greek dictionary.

Poverty had no power over him. He seemed to be raised above all worldly things. He had travelled for years through western and southern Asia on a mere pittance, and had laid the foundations of a new branch of science for the pay of a lacquey. He never went out except to fetch more volumes from the library. In summer he wore the coarse garments that could be procured in Kanam, and in winter he wrapped himself in his sheep-skin. The work itself was his life. He would earnestly and faithfully fathom the depths of Tibetan knowledge, hand over the results to the Government in Calcutta, and then continue his researches in Lhasa and pass at last into Mongolia. Finally he would search out the original home of the Magyars in Asia. But man proposes, God disposes.

News reached Calcutta that Moorcroft had died at Andkhoi in Bukhara. It was proposed to send Csoma thither to recover the papers of the deceased explorer, but the plan was never carried out. The Asiatic Society in Calcutta assigned 50 rupees monthly for Csoma's maintenance, but he was offended by the wording of the generous offer and refused it.

At the end of 1830 he left Kanam, where he had sojourned over three years, and took leave of his teacher,

the good Bande Sangs-Rgyas PHun-Tsogs, and went to Calcutta, where he was for several years librarian of the Asiatic Society, and superintended the printing of his large quartos, the grammar and the dictionary. Here he also wrote a number of learned essays and translated parts of the Bible into Tibetan for the missionaries.

He did not alter his Spartan mode of life in the capital. He took no part in society functions. He was not seen in the street. Silent as a Brahmin, he arranged the Tibetan manuscripts in the library and shut himself up among his own papers in his room, where he lived like a hermit and a misanthrope. Yet he had some intimates, a couple of friends who visited him frequently. The great Himalayan explorers, Moorcroft, Gerard, Wilson, Prinsep, Hodgson, Campbell, and others, came in contact with Csoma. The singular taciturn student could be lively and talkative when any one spoke of Hungary with kindly interest.

When he was fifty-eight years old Csoma resolved to travel to Lhasa and Central Asia. In Lhasa he would find the perfection of Tibetan learning, and in Central Asia would find the original home of the Magyars. He would devote ten years more to the East before he returned home. Probably he started from the Hugli by boat and then, travelling on foot through the fever districts south of the Himalayas, arrived on March 24, 1842, at Darjiling, among the cool mountains which separated him from his desired bourne.

Here he met Dr. Campbell who afterwards expressed his admiration of Csoma's learning, and his astonishment at the curious mixture of pride and humility which formed the groundwork of his character. He knew a number of languages, says Campbell, and was conversant with still more—Hebrew, Arabic, Sanskrit, Pushtu, Greek, Latin, Slavonic, German, English, Turkish, Persian, French, Russian, Tibetan, Hindustani, Mahratta, and Bengali, and he had a dictionary of every language with him. He had spent twenty-two years in travel, or a longer time than any

European since Marco Polo. An official in the service of the Raja of Sikkim was astounded at his Tibetan and Lamaist knowledge; a European who knew the languages and literature more thoroughly than any Kanpo Lama or Rinpoche!

Dr. Campbell recognized Csoma's worth, liked his society, and visited him frequently. He found him in a miserable hole sitting on a mat among four boxes of books. In this room, which was nothing better than a closet, Csoma worked, took his simple meals of tea and rice, and slept in a coarsely woven blue wrapper. And in this closet Campbell found him on April 6, ill of fever, and tried in vain to make him swallow a febrifuge. On the 7th Csoma was better, and he spoke cheerfully and with lively interest. "What would not Hodgson, Turner, and some philosophers of Europe give to be in my place when I come to Lhasa?" he several times exclaimed. He told with pride of his long journeys and his years of solitude on the frontier of Tibet, and was delighted with the sensation his literary researches had aroused among the learned men of Europe.

Campbell listened with almost religious reverence to his conversation, and thought that Csoma wished that not a single word should escape the attentiveness of the Englishman and not a syllable be forgotten. For now he spoke of the original home of the Hungarian race in Asia, of the Huns and the Uigurs, and of the key to the dark riddle which lay hidden in Lhasa and Kham in the extreme east of Tibet.

On April 9, the indefatigable pilgrim again lay in high fever. His complexion was yellow, his cheeks had fallen in, and his thoughts wandered along misty paths vainly groping after the original home of the Magyars. Now the doctor succeeded in inducing him to take medicine. But it was too late. On the evening of the 10th Csoma fell into a comatose slumber, and early the following morning he had ceased for ever his search for the open

tablelands where the forefathers of the Magyar had once ridden about on wild horses.

On April 12 the dead hero and martyr was borne to the grave. Campbell read the prayers as the coffin was lowered; all the Englishmen present in Darjiling attended the funeral. The Asiatic Society erected a monument over the grave, and the inscription on the tablet contains the following words:

. . . and after years passed under privations, such as have been seldom endured, and patient labour in the cause of Science, compiled a Dictionary and Grammar of the Tibetan language, his best and real monument.

On his road to Lassa, to resume his labours, he died in this place, on the 11th April 1842.

Requiescat in pace.

Csoma had devoted the years of his manhood to Tibetan studies and also sacrificed his life for them. His was a tragic fate, to be snatched away just as he was about to cross for the first time the frontier of the promised land, the forbidden land of the sacred books. On my way from Tibet, where I had spent more than two years, I had now arrived at Csoma's farthest point from the opposite direction. I trod with the feelings of a pilgrim the lanes and banks over which Csoma had wandered in solitude to and fro between the library and his monk's cell high up in the village. I cherished a slight hope of finding some memorial of his sojourn in this place, though seventy-eight years had passed since his time.

Therefore I turned to Gachen Lobsang Tarva, the representative of the superior of Kanam. I have already mentioned that he had led me to the small room in the upper monastery enclosure.

"Do you know nothing of that Lama-Sahib?" I asked him.

"No, nothing at all. But Yangpur, an old man of eighty-two, is the oldest inhabitant of Kanam; he may be able to tell you something."

"Let him come at once."

A messenger was despatched, and after a time we had old Yangpur with us.

"Do you remember the Lama-Sahib who lived here?" I asked him.

"No, sir; I was a child when he left Kanam. But I remember very well that my father used to speak of him, and said that he lived some years in the monastery dressed just like our own lamas and regarded by them as a colleague."

"Do you remember his name, Yangpur?"

"Yes, he was named Ganderbek," the old man answered without a moment of hesitation. In the evening I wrote in my diary: "This name Ganderbek can be nothing else but Iskander Bek, the name by which Alexander the Great is known in western Asia, especially as Csoma's Christian name was Alexander." Now I find that Moorcroft begins a letter of introduction, written in Kashmir in the year 1823, with the following words: "The object of this address is to bespeak your good offices for Mr. Alexander Csoma, or Sekunder Beg, of Transsylvania, whom I now take the liberty to introduce." Alexander, Sekunder, Iskender, Iskander Gander, Iskender Bek was certainly Csoma's *nom de guerre* in Asia.

"How did this Ganderbek occupy himself?"

"That I do not know, but I remember from my childhood that every one spoke well of him, and that he was highly respected."

"Is it certain that he lived in this little house?"

"Yes, that is quite certain; it was always said so from the time of my childhood. Ten years ago the house was shaky and the beams were jointed more firmly together, but just in the same form as before."

A low door and a small window open on to the verandah, both with red-painted frames while the other parts of the wall are white. The inner walls are of stone recently white-washed, and therefore it is useless to look

for any remarks written or scratched on the walls. On the long side opposite the door and window stand a wooden bench and a small cupboard, both roughly made in European, not Asiatic, form. Yangpur asserted that they had belonged to Ganderbek. In addition there was a simple wooden couch. Narrow beams supported the roof and the floor was constructed of thicker boards. The whole accords exactly with Gerard's description: "Two rustic benches and a couple of ruder chairs are all the furniture in his small abode." Now the chairs were gone, that was all. The position of the house in the village and with relation to the *Kanjur-lhakang* is just as described by Gerard.

One of the finest landscapes on earth was displayed to the eyes of the student when he stepped out on to the verandah. Deep down at the bottom of the valley the narrow wild Sutlej winds through abrupt corridors, and in the background rise the sharply cut pyramids of the Kailas group. Dark-green patches are seen on some slopes—coniferous woods. How often must Csoma have looked at these mountains and valleys during his years of solitude! I could not gaze at them long enough, monuments erected to his memory as they seemed to me.

But the hours had slipped away and it was time to go down to the tents. Half-way down we looked for a moment into a third small temple, the *Tarbaling-lhakang*, which had been redecorated five years before and was bright with gaudy colours. The old gods keep their places. Chamba sits there, ten feet high, with dangling legs and a crown-shaped diadem on his head. The monks differ from their brethren in Tibet in wearing small yellow caps and beards. Young bareheaded nuns carried water up to the monastery. Twenty monks and twenty-three nuns, belonging to the yellow sect, are said to serve in the sanctuaries of Kanam.

We had seen enough and, indeed, could see no more, for the darkness was deepening, and just as we prepared

to go on again the conch summoned the monks to evening service, and a lama on the roof of the *Tarbaling* intoned in a loud clear voice " Om mani padme hum." The six holy syllables sounded as melodiously as the call to prayer of the muezzin from the platform of a minaret at sunset. The dogs barked in the yards and the grasshoppers kept up a shrill concert in the thickets. But above every sound was heard the roar of the mighty river down in the valley.

When I reached the tents Little Puppy came to meet me barking a welcome. But why did not Takkar come? He was not lying at his usual post among the tents. Two of my men went out to look for him, scoured the roads and bridges in the neighbourhood, shouted his name, and called him with piercing whistles. But he did not hear, and never showed himself again. He had turned round and run back to Poo.

CHAPTER XXXIII

MY AMAZONIAN ESCORT

THE morning of September 2 was pleasant and cool after 55·9° in the night. The gnats did their best to disturb me in my sleep, and it would have been well if I had had a mosquito net; but what did it matter, for I had run the gauntlet and was now immune?

Noisy music of drums, cymbals, and trombones from the roof of the upper monastery of Kanam awoke me early in the morning, and when I looked out of my tent a new relay of coolies was waiting for our baggage. They wished to set out early that they might not have to march during the hottest hours of the day. Only two were men, and all the rest women, in frocks of coarse material and black, brown, or grey vests, which left the arms and shoulders bare. Silver pendants dangled from the lobes of their ears, bangles of brass adorned their wrists, and their naked feet surprised me, for they might have to walk over sharp rubbish and unmade paths where even horses get sore feet. But their soles are hardened by constant wear, and are as little sensitive as the callosities of a camel's foot. Our noble portresses had never touched the water of the brook of Kanam, but they were jolly, fresh, and dainty. Mothers and young girls slung our baggage by cords and straps on to their backs in a moment, and vanished with it into the shady lanes of Kanam.

A little later we followed in their footsteps along the bank of a canal shaded by leafy walnut trees. Blessed summer, lovely vegetation, how long it is since I saw such

wealth! We are soon out of the maze of Kanam; the memorable village and its picturesque houses like swallows' nests disappear among the hills, and we go down to a bridge over the brook and up on the other side to the village of Kyap. Pill, too, and other villages, we pass on the road, which is still bad. I prefer my own legs to those of my horse, especially as a huge overhanging rock obliges me occasionally to bend my head sideways over the yawning abyss. We are now no longer so high above the rushing whirlpools of the Sutlej. The current is no longer so swift, and one feels much inclined to try a raft on this restless water.

We are at a sharp corner where the great side valley Kirang comés down to the Sutlej. The bridge over the tributary stands rather far up the valley, so the road runs up to a sharp point. From the corner we descend at first. The landscape is magnificent and fascinating. Old fir trees spread over us their refreshing sweet-scented crowns, while below us the cliffs fall suddenly to the Kirang river, hiding it from us in the meantime. In only two bends of its bed can we see the stream tossing in white foaming falls and rapids over boulders and bars, and we perceive that the pure cold water of the Kirang is able, on account of its greater velocity and huge volume, to thrust out a light-green semicircle into the grey dirty Sutlej. Up the valley are seen fields and villages, one of them being Kirang. Just by the solid bridge the river forms thundering falls, dashing over gigantic rounded boulders. Wherever one turns the eyes fall on a charmingly beautiful scene. Let us linger a moment in the shadow of a rock to drink a cup of the cold water of the Kirang, which brings fresh greetings from glaciers and firns to the heat prevailing here. Life is worth living!

Here one might forget all his duties to stay for years as Csoma of Körös did. But we must go on, up the right bank where the road runs through fine woods of firs. Here I can ride again. From the Kirang bridge the road is

excellent, for so far the trade highway, planned by the Indian Government to the Tibetan frontier, is finished. Above Kirang also we had seen preliminary work at many places. Will the Tibetan Government follow this example on the other half of the route, from the frontier to Gartok? Yes, if they are compelled by a treaty, not otherwise. On the Tibetan side, moreover, there are greater difficulties to contend with. But, as it is, the stranger from Tibet gives a sigh of relief when he is past the Kirang valley. He enters on a splendidly made road, which avoids all dangerous precipitous cliffs or abrupt slopes, and has everywhere a regular gradual ascent.

And here! Another reminder of the power of England and the proximity of civilization. A small black tablet on a milestone bears in white oil-colour the inscription, "Simla 165," and for greater assurance a light-coloured board with black figures proclaims once more "165." So many English miles still separate us from our destination. We regard this milestone with a certain respect; it knows more than we do. It has 164 comrades, and we must pass them all. With growing elation the pilgrims watch the numbers fall and the distance shorten. 165 miles more to Simla—a mere trifle when I think of the distance I have travelled!

I sit dreaming on my white horse as though spell-bound. The whole air sings, there is a buzz and murmur in the forest and in the depth of the valley. What is it, then? Ah, our guard of Amazons is climbing the heights. Look there, how they stride along between the trees in a row, with heavy firm steps and swinging gait. How charming sounds the song from young, almost childish, throats, and how happy! Before we overtake them they have halted to take a rest. Gulam and Kunçhuk, who accompany them, have never enjoyed themselves so well in their lives; they dance for pleasure and are quite beside themselves.

I wish to hear them sing again and wait therefore until they troop off under the dark pines. The rhythmical

sonorous singing peals out through the forest and is not overpowered even by the roar of the Sutlej. We might be in a theatre. And what a theatre! Look at the background formed by the mountains on the left side of the Sutlej! Look at those gloomy recesses of dark-green conifers! The setting is the best after all. And round about whisper gentle zephyrs with the odour of the forest, and the roar of the victorious river resounds among the mountains. We travel as to a festival in these heavenly Himalayas. How different from dreary Tibet, where no forests overshadowed our road, no rivers made for the sea, and no women sang!

I ride in front. The singing becomes fainter and dies away in the distance. Only occasionally when we, the choir of singers and myself, find ourselves at the same time on a projecting spur of rock, can a few low notes be heard. But beyond the next corner of mica-schist I hear the song no more.

When I reached the village of Gyengring our horses and mules were already grazing on a meadow, and I rode off to our first bungalow, the last shelter on the Tibetan road. The keeper stood squarely in front of the door and told me that I could not pass the night there without a permit from Simla. A permit from Simla, when I came from Tibet! In Totling the doors were shut in our faces, but here we were on English ground. "Out of the way, old man." The lock must have been out of order for the door opened when I grasped the knob, and in a minute I had made myself comfortable in a pleasant room with a bedstead, table, and chairs. The yard where the men set up their tents stands like a platform above the valley, and the view over the Sutlej is charming.

Our female coolies laid down their loads in front of the bungalow and sat down to wait for their pay. And they had to wait for a while until I had drawn the portraits of some of them. Then they received an extra douceur for their pretty cheerful singing.

Little Puppy made me laugh by the extraordinarily cautious way in which he crossed the threshold of the bungalow. Apparently he thought it was some kind of bridge. " It is surely some new devilry," as Sancho Panza says at a historical moment in the edition of *Don Quixote*, which wiled away many a long evening in Tibet. When Little Puppy had convinced himself that the deals of the floor did not shake like the bridges of the Sutlej, he picked up courage and laid himself down in the shade.

On September 3 our loads were transported, not by Amazons, but on mules, a striking contrast. But the Sutlej remained with us, and the road was always beautiful. On the farther bank opens the great side valley Rangri, and snow mountains shimmer in the background. Above the villages Morang and Risba, Kailas, or Keila as the name is pronounced here, towers among the clouds, a huge dome of snow and ice, with a circle of sharp pinnacles like a royal crown.

We have come somewhat lower, and the roar of the river is louder. The village of Apek lies behind us, and Aren below us; we pass by Riberang on the left bank and by Rarang. I scorn the bungalow of the latter, but turn my attention to its *chhorten* portal and its *mani* walls; they convince me that here Lamaism still holds its own. A man passing by gives me a fine bunch of grapes; the berries are very sour but refreshing, and the main thing is that they are actually grapes. The heat is not great; there is a wind, and the forest is dense; the dark-brown or grey stems of the conifers often stand among large boulders of granite and mica-schist. Where the road has been damaged by landslips and the decay of the timber, navvies are at work with spades and picks, and they always beg for a trifle to recompense them for their labour on behalf of travellers. We are now close to the Sutlej, and the noise is quite deafening. The river is larger than we have yet seen it, and is encumbered with foaming rapids. It would be death to attempt a voyage on a raft.

Two men on foot in Indian uniform came up and saluted us. One bore on his shoulder-strap a metal plate with the inscription, " His Highness the Raja of Beshahr."

" What do you want? " I asked.

" The Tesildar of Chini has sent us to attend on you and look after the transport."

" How did he know that I was coming? "

" Deva Ram of Poo has sent a runner."

And now we go uphill again, but not for long. Where we come down to the river again the road describes a double loop in the form of the figure 8. Chutar-kar is a large side valley with a fine river, crossed by a bridge of two arches. The valley is sunk between vertical cliffs; its fall is rapid, its channel full of blocks. The river fights its way down with frantic fury and forms a succession of white foaming falls. Here we halt for a while to watch the struggle of the water with the stones. The noise of the Sutlej is lost in this thundering tumult.

Beyond the bridge comes another stretch of fine coniferous forest, so dense that it is twilight under the crowns. A sunbeam breaks through here and there, and makes a granite boulder glow like fire. But the country is most beautiful where we see nothing on all sides but perpendicular cliffs. Here the road is blasted out of the rock, and the schist, gneiss, or granite forms an arched roof over our heads. Owing to the blasting the rock presents a fresh surface of fracture. On the outer side the road is protected by a low stone wall with small drainage holes.

In a valley trough on the left bank we perceive the village of Pundam with its huts, fields, and groves. On our side the fresh dark-green forest increases in extent, and we enjoy the strong odour of pines. The road forks; its right branch leads up to the comfortable bungalow of the village Pangi, where I can lie and stretch myself in a deck chair on the balcony, and where white Vandals have perpetuated their unknown names on the table top.

Illustrated papers and ragged novels are also signs of tourists' visits.

Early next morning the whole Sutlej valley lay buried in white mist, through which only the nearest trees were faintly visible—otherwise the verandah of the bungalow might have been an airship floating among the clouds. Soon the mist parted and the peaks of Kailas appeared again brightly lighted by the morning sun, with the turquoise-blue sky as background.

A short way beyond the bungalow we pass the village of Pangi and then through the well-watered Kojang valley, in which stand clapping mills and neat compounds. Farther down we come to Chini. While the caravan is proceeding to Rogi I go up to visit the missionaries, Mr. and Mrs. Bruske, and talk with them a while about the Land of Snow, for they have long watched for an opportunity of travelling to Tibet to preach the Gospel to the followers of Buddha. I could not encourage their hopes of better times and an open road over the frontier. They proposed to give up their fixed dwelling and travel about among the villages to address the people. In Chini " Om mani padme hum " has not all its own way with the souls of men. We are now in a district where Lamaism is losing its hold and Hinduism has the upper hand. Only a quarter of the population is Lamaist, and there is one Lama monastery for two Hindu temples. Several new *chhortens* and *mani* walls seem to indicate a chance revival of the Tibetan religion. The village is said to contain 500 inhabitants, who all belong to one tribe called Kanauri and are divided into three clans, each with its own language, or at least a dialect widely different from the other two, in which many Tibetan words are incorporated.

Time flies quickly in pleasant company, and all too soon I am obliged to leave the kindly missionary couple, and ride on along the road which, for the most part, is blasted out of vertical cliffs and has a crenellated breastwork. It is not much farther to Rogi, where we make ourselves at

home in the bungalow. The camping place is numbered 490, and we have only ten days' journey to Simla. It would be bad luck if the mad dog were to bite us, which is rendering the roads of the neighbourhood unsafe according to the warning " Cave canem " displayed on posters.

Here we are at a height of 9350 feet. The minimum at night is 57.7°, and the air is fresher than it was higher up. We still see the peaks of Kailas, partially veiled in a dense mantle of cloud. Granite surrounds us and black mica-schist dipping to the north.

I write September 5. Again milky-white impenetrable mist fills the valley, but it is almost gone by nine o'clock, leaving only thin wisps of light gauzy cloud. The forest becomes thinner, the road runs through tracts of bare rock, the Sutlej is out of sight but its roar fills the mountains and valleys. I have forcibly to suppress an exclamation at a corner of the road where the indescribably magnificent valley of the Sutlej again comes into view. Look on the other side at that wild side valley, Bosba-garang, with its great river rushing for better or worse to the Sutlej. The main river grows with every fresh tribute of water which it mingles with its own. Just hear it roar. Look how it works to cut ever deeper into the heart of the Himalayas. Think of the pressure of this volume of water, and remember that it is in constant movement and rolls boulders and pebbles down its bed. No wonder that the valley is so deep, and that the landscape which fascinates our eyes assumes such grand contours and wildly-fissured forms.

In a small, deep side valley with a brightly-rippling brook we meet a mule caravan with loads which can only belong to a white man. There he comes, the owner, on foot, in a light summer scouting suit with a white Indian helmet on his head. Of course I dismount, and we salute each other. It is Lieut.-Colonel W. W. Norman, of the 22nd Regiment of the Frontier Force, with whom I have the honour to converse. We talk perhaps an hour in the shade before we go on, each in his own direction.

We have now descended, and the noise of the river increases in force. Ah, there is another side valley, the deep channel of the Yula-garang, which has cut down into the solid rock with furious violence. Beyond its bridge the road mounts again up to the bungalow of the village Urni. I wonder if anywhere in the whole world there can be a camping-ground in a finer situation than this, hanging over the valley of the Sutlej and commanding a charming view of the gigantic chasm up-stream. The station buildings have been purposely erected at the grandest point of view, in order to attract tourists from Simla.

Atmospheric effects presented a singular spectacle at Urni. The valley became suddenly filled with white vapour, which completely veiled all the environs and was not dispersed even by the heavy rain which poured down for an hour and a half. But when the rain ceased, a light breeze swept away the mist little by little, and white cloudlets came sailing along like dragons, while others in the form of balls and bells rose slowly upwards like balloons. The bottom of the valley was still filled with clouds of fog. The whole scene was extremely curious and perplexing. A sea of milk from which rose islands and holms. Air, water, earth, everything is alive in the Himalayas. In the heart of Tibet there is life only in the air, and the water is only occasionally roused from its torpid sleep when the storm wind lashes the lakes, and the surf strums its melancholy hymns on the beach.

The next milestone announces that we have only 126 miles to travel. 7874 feet above sea-level say the hypsometrical instruments. And the minimum thermometer declares that we had 61½° in the night of September 5.

Now we go down again, and after two hours are barely 65 feet above the river, and its din is overwhelming.

"What is the name of this river?" I ask the guide.

"Ganga," he replies.

"Not Langchen-kamba?"

"No, I have never heard that name." The Tibetan

appellation stops at the frontier. The answer of the guide might seem to imply another confusion of the Sutlej with the Ganges, but *ganga* means simply "The River."

Our road skirts the bank. At one place three huge boulders have fallen into the river and the water flows between as through a gateway. A dangerous-looking path also runs along the left bank where a small deeply excavated valley opens—the Ramni-kar.

The gneiss stands in abrupt cliffs facing the valley, and huge blocks lie more frequently in the bed, like signs of warning to travellers and caravans of the danger that is ever present there. The water has eaten into them until they have been worn round, and a patient stream of water has hollowed out holes and indentations in their sides, flat surfaces and curved ridges—gutta cavat lapidem. It is their fate to be annihilated in time and be replaced by new blocks. Round them the water dances in foaming waves, showers of spray shoot up from hissing cascades between narrow apertures, and small falls pour down in bright domes of water which passes below into foaming whirlpools and witches' cauldrons. A raft would be of no use here; it would be dashed to pieces before one had time to look round, however stoutly it might be built.

A new surprise awaits us at a place where the rocks fall perpendicularly to the river, or slightly overhang. To blast out a gallery in the rocks would have been too expensive, for the distance is a hundred yards. Therefore all that has been done is to fix stanchions into borings in the rock and lay over them an open bridge with a rail on the outside. The height of this bridge above the river is perhaps a hundred and thirty feet, and when one leans over the railing the Sutlej is immediately below. Here the view is splendid, almost awful.

Beyond this bridge clinging to the precipice the valley contracts, though all dimensions are still colossal. Caves and gigantic potholes, once worn out by the water of the river, yawn empty and dry on both sides of the valley,

showing how deep the river has cut its way down since they were formed. Again a noise of thunder is heard in front of us. The side valley, Pabe-kar, sends its great stream down to the Sutlej. A white imposing waterfall leaps down above the bridge over the Pabe. This bridge does not spoil the landscape. It rests on natural piers and dams, on boulders that have fallen into the bed. Overcome with astonishment and admiration I remain standing and sacrifice two of my last copper coins.

The next surprise in our way is the fine Wang-tu bridge, which, borne by ten wire cables anchored in the rocks, throws its solid roadway across the Sutlej. We have never been so low (5361 feet) and we are only six feet above the river. But we do not enjoy the satisfaction long, for on the left bank the path winds up again to the rest-house of the village of Nachar.

One of our horses from Bongba was resting with his leader at a bend in the road. He stood on trembling legs and whinnied with pleasure as he saw his white companion and his countryman pass by. But he saw us for the last time and his whinny was a parting greeting. Why did he stand in the broiling sun, when there was only a mile to dense forest with its cool shade? He could go no farther, he was worn out. His sight would soon be dimmed by other shades, darker than those of the forest.

CHAPTER XXXIV

THE LAST

I MIGHT have come to a conclusion at the turn of the road where the Bongba horse died. The remaining nine days' journey is only the last section of my retreat from the Tibetan frontier, which passed through well-known country. Many Englishmen travel annually along this road, and I have nothing to relate which has not already been seen and described by others. But we will let the line run out.

From the bridge of Wang-tu over the Sutlej we ascend 1770 feet to the bungalow of Nachar. During the next day's journey we descend the height of an Eiffel tower to Paunda, passing over open slopes or through fine groves of Himalayan cedars and copses of alder. The traffic increases and we meet travellers, small herds of black and white cattle, handsome and well fed, and sometimes with loads, sometimes without.

Next morning nine coolies stand before the house in Paunda, waiting for our dilapidated packs, and with them we descend to the valleys of Soldam which run together just below the road. Here stands a last Lamaist road-portal with the usual painting under its arch and a *mani* wall beside it. The religion of Tibet burns in these valleys with an expiring flame. Here waterfalls and cascades shoot down, here rivers murmur among stones and boulders, here the environment is quite different from that in the quiet, majestic repose of Tibetan monasteries with their peaceful solemn gloom. We are again so low down that

forest cannot flourish, but we see its dark masses on the heights to the left of our road.

When we leave the Soldam valley we again mount to the forest zone and soon enter its dark shady canopy. Our coolies march up leaning forwards and with slow steady steps, often resting and propping their loads against blocks and ledges without taking them off. At the bungalow of the village Taranda we are again 7020 feet above sea-level.

It rained heavily in the evening and night, and when we set out next morning the road was slippery with mud, and drops fell from the drenched foliage. But the air was beautifully cool, and there was a pleasant odour from the forest. Sometimes we went down gradually, sometimes remained for a good way at the same height. We crossed three side valleys and a small pass before we reached the rest-house of the village Sarahan.

Here I was surprised by a letter written in English from the Raja of Beshahr, Shumshir Sing by name, who in polite terms asked if he might pay me a visit. I should think so! A Raja asking for an audience! "Your Highness will be heartily welcome," I wrote back. And His Highness came, but not a highland prince with light elastic gait. He was a very shrivelled old man, who, from age and infirmities, could no longer stand on his feet, much less walk, but was carried on a litter by turbaned servants. They helped him to an easy-chair in my room and then a very singular conversation began. The noble prince was almost stone deaf and I had to yell into his ear to make myself audible. His English was not easily comprehensible to any one who can hear as well as I can. But for all that we chatted away, both at the same time, and before I had thought of giving directions to Gulam my guest gave his own orders.

"Bring me some tea and cake, and put tobacco before me, for I will smoke a pipe."

Meanwhile he looked round at all the trifles lying about, and, without a change of countenance, and without speak-

ing a word, put two of my last pencils into his pocket. No doubt it had become a habit of his to plunder the visitors to the bungalow in this harmless fashion, and I would willingly have given him a whole cart-load of pencils if I had been able.

"How old is Your Highness?" I asked.

"Forty-nine years," he answered boldly, and without a moment's hesitation, though he must certainly have seen eighty springs pass over the lovely country of Sarahan.

"How old is Your Honour?" he asked me.

"Forty-three," I replied.

"Then I am three years older than you."

"Just so," I answered, for I would not make a fuss about a paltry difference of three years, when he himself had so coolly taken off some thirty years. Thereupon this remarkable visit came to an end. My offer to return his visit was decidedly refused. Early next morning the old Raja was announced again, but I sent word that I unfortunately could not see him, and made off quickly with my pencils.

The next day's journey took me over the side valley Manglard-kard to the bungalow of Gaora, which was, indeed, smaller and more unpretentious than the foregoing, but to me dearer and richer in memories. For here a messenger sent from Simla by my gallant friend, J. R. Dunlop Smith, brought me a large bag of letters from Stockholm. Now I forgot everything about me; the proud heights of the Himalayas towering above me vanished; it was a whole year since I had heard a word from home.

At Gaora the height above the sea is 6024 feet, and the temperature fell in the night of September 10 to 40.8°, so that it was quite cold in the morning. But it was to be very different during the day. The road runs down all the way, and I went on foot through this incomparable country. In the large village of Rampur on the Sutlej I was only 3870 feet above the sea, so that I had descended 2150 feet during the day. The air was damp, warm, and close as in

a conservatory. The breath of the hot Indian summer fanned our faces. The Sutlej foams some thirty yards below the village, and its well-known roar again salutes the ear. The river is imposing here. Its droning murmur seems to announce that it is proud of its work. It has overcome the loftiest wildest ranges of the Himalayas, and has only small crests to cut through. But it is tired of its exertions, and longs to get out of the mountains to the open plains of the Punjab and the boundless sea—Thalassa, Thalassa!

Raj Sahib Mangat Ram, one of the officials of the little state, had come half-way to meet me, and while I sat writing at the large table in the verandah of the bungalow, he had twelve dishes laid on a carpet on the floor, containing piled-up rice, spices, sweet biscuits, and fruit. Also a servant dragged in a struggling sheep. I made my acknowledgments for the attention, fully determined to make good the value of the presents in full. For Beshahr is a poor state, and its officials certainly cannot afford to present fruit and refreshments to all the white visitors who choose to put in an appearance at Rampur. The state revenue is said to amount to thirty thousand rupees. When it was proposed to build a new bridge near Poo, where we dangled under the fearful cable over the river, not more than eighteen hundred rupees could be spared for its construction. The new bridge would have gone the same way as the old. The budget has also other expenses to provide for; thus the state minister receives for the invaluable services he renders to the principality two hundred rupees a month, and there can be very little left for the little Raja who is so fond of pencils.

Yet the Raja could afford to live in Rampur in a palace called Shishe Mahal, or the Glass Palace, a commonplace building in debased oriental style, with coloured glass windows, badly-painted portraits of the owner and other princes, and cheap, showy knick-knacks on the walls and in the verandahs. The court bears the pretentious name of

Top-khaneh, or Artillery Court, and two old rusty muzzle-loaders actually stand in it. All bears the imprint of decline, decay, and bad taste. Give me the monasteries of Tibet, their solid architecture and pure unadulterated style.

There is little else to see in Rampur. But yes! A bridge over the Sutlej, a bazaar street with shops and workshops just as in India, a post-house, a school, and two Hindu temples, which contend successfully with a Lamaist monastery for the souls of the inhabitants. In the last a solitary lama showed us the great prayer-cylinder with its 187,000 *manis*, which was just then being turned by a believer. He told me also that this is the last monastery on the road from Tibet. Then farewell ye monks with your everlasting "Om mani padme hum!"

Next morning all the office-bearers presented themselves for a farewell visit, now reinforced by the postmaster, the schoolmaster, and a fat pundit named Narayan Dutt. After all who had been attentive to us had received liberal gratuities, I wished to pay for the entertainment of the previous day and for the sheep. The rupees were counted out on the table, but the noble gentlemen declared magnanimously that the edibles were a state affair, a gift of welcome in the name of His Highness the Raja of Beshahr, and that compensation was out of the question. So I thanked them for their liberal hospitality, bade them send my acknowledgments to the Raja, and mounted the tall black horse which I hired here, and which was to carry me to Simla instead of my faithful white friend from Kamba Tsenam's tent.

The good men and women escorted me in procession when I left Rampur. The schoolboys were drawn up in two ranks on the road, and giggled and salaamed as we rode past. "Good luck to you, boys," I called out, and then I begged the procession to wear out no more shoe-leather on my account. Glad to be released from the constraints of politeness, they bowed low and returned to the village.

I ride on along the Sutlej river. The majestic stream is quieter and smoother. The valley widens a little, the slopes become less abrupt, the road runs thirty to sixty feet above the water, and on the bridge over the tributary Nogri we can again admire foaming emerald green volumes of water which disappear in the lap of the Sutlej. Beyond the village of Date-nagar the river makes a sharp bend, and at the narrowest point a rope bridge hangs between the banks. This long hammock does not look exactly trustworthy, but it is grand compared to the cable near Poo.

In Nirit we are at a height of 3658 feet, and at one o'clock read off 87.8°. This seems oppressively hot to those who have spent two years in Tibet. Even night does not bring coolness here, for the minimum is 70.5°.

I must relate an amusing little incident in Nirit. As I sat writing, Gulam came into the verandah, quite excited and boiling over with rage, to tell me that when he, who always remained behind us to pack up the last articles, was about to leave Rampur, a bill was quite unexpectedly presented to him. The good hosts demanded compensation for the sheep and the other delicacies I wanted to pay for. As Gulam had no money with him, the man wanted to take his revolver. At last it was agreed that one of the men should accompany him to Nirit and lay his claim before me. And now he presented himself, and when Gulam saw him his anger burst forth again. He gave him a couple of such sound buffets that the man tumbled over into the bushes, and then quickly took to flight. When Gulam had retired to the kitchen, the unexpected creditor came back and received compensation not only for the entertainment but also for the thrashing given him. He was allowed to keep the sheep, which, curiously enough, had lived through all the squabble. One has always to be cautious about presents in the East.

September 13 was a Sunday, and I had a delightful ride to Kotgar. We had to ascend from 3658 feet at Nirit to 5610 at Kotgar, or the height of two Eiffel towers, towards

cooler regions. For a time, however, the road skirts the bank of the famous river. It is still quieter. There are, indeed, rapids here and there, but the grey turbid water no longer tosses and foams as violently as farther up. The Sutlej is tired after its work; the huge volumes of water need no longer toil, and they glide lazily down to the plains, no longer singing loudly and triumphantly, but still humming the old song. At times the river is quite silent, and then it lifts its voice in new rapids. I hear it once more and see it disappear for the last time behind the hills as I ride away from its bank to the heights round Tanadar.

How pleasant it is to leave behind the suffocating valley and its close humidity. The air becomes cooler and fresher the higher we mount, and small white clouds cast shadows on the ground. In the distance appears Kailas again, the abode of eternal snow.

Several Europeans were staying just then in Kotgar, and I was entertained with extraordinary hospitality. Among them was the missionary Bentel, who had worked thirty-eight years as a preacher. I attended the English Church in the evening and heard again a Christian service. The caravan reached the yard of the bungalow at Kotgar later than usual. One of the horses from Chang-tang had been unable to climb the ascent from Tanadar; it had fallen down a precipice and been killed on the spot. Of ten animals, three had fallen victims to the road from Tokchen to Simla.

September 14, fifty miles more. At a bend in the road I met six runners with an empty rickshaw. It was a pleasant change to take my seat in a light two-wheeled carriage and be borne over high dome-shaped crests and ridges. I smoked cigarettes, wrote down my notes, and let my eyes rove freely over deep valleys and far-stretching distances. I had no need to be anxious lest my runners should tire. A new team awaited me at every bungalow, and I could travel on as long as I liked. At Narkanda we were higher than we had ever been since leaving Rogi,

8790 feet above the sea. In Theog I stopped for dinner, and then travelled in the dark with lamps on the shafts. The wheels creaked, the bare soles of my runners tapped on the hard smooth road, and the light danced merrily in front of our party. But it was a pity to lose the beautiful view, and I did not wish to arrive at Simla in the middle of the night, so I camped for the last time on this long journey, in the bungalow of Fagu, at a height of 8200 feet.

The last day breaks! The morning is fresh and bright, and I set out early for the beautiful place which bears the camp number 500. My runners skim along as if they were oiled, and the rickshaw rolls down the gently-falling ridge towards Simla. The cheerful white summer houses on the cedar-clothed hills grow larger, and soon we are speeding through the luxuriant pine forests which hang over deep valleys.

I frequently gaze with pleasure out of my windows in the hospitable Viceregal Lodge. Now flooded with sunshine, now overshadowed by heavy rain-clouds, the Himalayas display their wonders around me. I am stranded on a reef in a boisterous sea. Beyond the ridges to the east, I know, the holy mountain lies where Brahma is enthroned in his heaven and Siva dwells in his paradise. And beyond the darkness of legends my royal Trans-Himalaya lifts its snow-clad ranges to the sun.

Westwards the crests of the Himalayas sink down to low hills, which finally pass into the boundless plains of the Punjab. On the edge of the horizon these waves fade away like petrified surf on the coast of a desert sea. Amid the yellow haze at the foot of the mountains a dark riband is seen in the distance meandering past Firazpur to the Indus. It is the Sutlej. The roar of its water still lingers in my ears, and I still seem to hear the proud river sing of its yearning for the sea.

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